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About the cover...

Current Procedural Terminology (CPT) 2001* includes a number of changes that are of significance to general surgeons and their staffs. The lead article, "CPT changes in 2001," by John T. Preskitt, MD, FACS, and Jean A. Harris (p. 14-17), describes those modifications in code sequence and explains how to use the codes. Some of the specific procedures that have undergone code changes include wound repair, breast biopsy, biopsy or excision of lymph nodes, endoscopies of the small bowel and rectum, and laparoscopic procedures.

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From my perspective

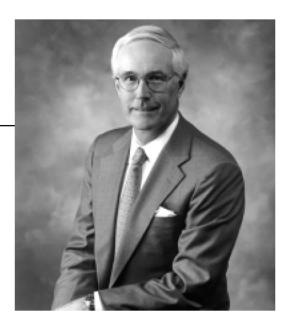
s I complete my first year as Executive Director of the College, it seems appropriate for me to reflect on this experience. It has been a year of great transition for me, not only because I moved to Chicago, but also because I have become much more familiar with the intricacies and the inner workings of the College and with the excellent staff who serve the Fellows so loyally.

During the past year, I have spent a significant amount of time travelling to universities, chapters, and local or regional surgical societies. As a result of my travels, I have come to fully appreciate the differences in practice from state to state and between urban locations and rural areas. Also much clearer in my mind are the special needs of the various surgical specialties, and the fact that the College must determine how it can best serve them. Looking back on the many discussions I've had during the course of my travels, one overriding reality comes to the forefront-we must start coming together as a group of surgeons rallying around our primary mission of caring for the surgical patient and, in the process, truly form a "house of surgery" and put an end to unnecessary fragmentation and divisiveness.

To help build a more cohesive and responsive organization that can truly achieve our goals, we are entering into an active phase of planning for the future. As I reflect on the last year, it is clear that many programs have been strengthened or expanded and mark the beginning of this ongoing planning process. Following are comments about some of the progress we have made.

Activities for young surgeons

Because young surgeons represent the future of the profession and of the College, I am very pleased to have seen the development of programs designed to meet their needs. For instance, the Candidate and Associate Society has succeeded in recruiting over 6,000 young surgeons and in forming an executive council. Additionally, we have established a job bank, and a number of residents have informed us that they have secured gainful employment through it. Finally, we have continued to seek further ways to fund scholarships and fellowships for young surgeons.



and responsive organization that can truly achieve our goals, we are entering into an active phase of planning for the future. 77

Improved access to educational programs

The educational activities of the College are designed to meet the needs not only of residents, but also of active, participating Fellows, and we have begun exploring ways to evaluate and enhance these programs. The Spring Meeting was a great success again this year, as was the Clinical Congress. A new activity related to the Congress is the upcoming launch of a "Web-casting" program to allow surgeons who could not physically participate in the meeting to have online access to the information provided during the courses. This program will be available on the College's Web site—www.facs.org—late this month or early in February. We hope to expand this pilot program in the future to capture more activities at the Clinical Congress for those who are unable to attend. This is just the beginning. Indeed, the Internet will be increasingly important as we use it to make customized educational programs available to our Fellows in their own offices.

In another innovative move, the College recently has fostered the development of a National Ultrasound Faculty under the leadership of Steven R. Shackford, MD, FACS, of Burlington, VT. This group has organized a series of "hands-on" ultrasound courses, in a modular structure, which have been taught at national College meetings for the past several years. We are now ready to export the courses to other surgical meetings. Remaining under the sponsorship and management of the College, the first two courses are scheduled to be presented in the spring of 2001 in Cancun, Mexico, in conjunction with the Southwestern Surgical Congress, and in Atlanta, GA, as part of the meeting of the Society for Surgery of the Alimentary Tract.

Additionally, our Office of Continuing Medical Education (CME) will be further developed this year as we continue our effort to offer the ability to accredit programs regionally or locally and to be a major source of credible CME. Finally, the *Journal of the American College of Surgeons (JACS)* will be circulated to all Fellows beginning this month, and a CME program—both electronic and print—is now available for *JACS*.

As we look to the future, we are conducting an in-depth analysis of all of our educational programs, which is being overseen by a work group chaired by two Regents. We intend to more precisely tailor all of our programs to reach surgeons in all specialties and to make our programs useful in responding to the continuing certification and competency movement.

Services for practicing surgeons

I continually think about valuable services that we can enhance or add in an effort to make the College more relevant to the practicing surgeon. One such vehicle is our Web site, which continues to expand literally on a monthly basis. An online directory of Fellows was launched about a year-and-a-half ago and has now been enhanced with a program through which Fellows can update and edit their individual online directory listings. The Web site will continue to

be improved to facilitate the activities of Fellows and to allow patients to access educational information and to be able to find Fellows of the College in their local area when they need an operation. In addition, through cooperative relationships with Web-based companies like Web MD, the College is providing Fellows with the wherewithal to create their own Web site.

In addition, we realized that our previous process for applying for College Fellowship was too arduous for today's busy practicing surgeons. As a result, we have facilitated application for Fellowship by decreasing to only one year the required time in practice before an application can be accepted, and very soon surgeons will be able to apply electronically.

Last year we also generated two services that augment surgeons' efforts to comply with regulatory policies and to locate worthwhile speakers for chapter meetings. More specifically, the Board of Governors Committee on Ambulatory Surgical Care updated our *Guidelines for Optimal Ambulatory Surgical Care and Office-Based Surgery*, and the College established a speakers' bureau for chapters.

Research efforts

Many Fellows in private practice as well as in universities have participated in the American College of Surgeons Oncology Group (ACOSOG) and have entered patients in clinical trials. This program will continue to diversify, allowing us to advance the science of surgery.

Additionally, we plan to expand and improve the capabilities of the National Cancer Data Base and the National Trauma Data Bank to once again make them sources of current information about treatment of these conditions for practicing surgeons in all specialties. We anticipate that all of our activities in the area of evidence-based surgery will offer ongoing value to Fellows.

Health policy and advocacy

The College devoted considerable time and effort to numerous activities in the health policy and advocacy area during the past year. Our Capitol Hill Visit Program for the chapters re-

mains active, as do our workshops on coding and on fraud and abuse. Some of the more specific advances we made this past year in terms of advocating for all surgeons include:

- Completing Medicare's second five-year review of relative values and successfully defending our recommendations before the AMA/Specialty Society RVS Update Committee (RUC) and the full RUC.
- Persuading the Health Care Financing Administration (HCFA) to refine the practice expense values for evaluation and management services.
- Attaining a seat on the Practicing Physicians Advisory Council (PPAC), which advises the Secretary of the Department of Health and Human Services.
- Encouraging a critical evaluation of the National Practitioner Data Bank and allocation of federal funding for the Trauma Care Systems Planning and Development Act.
- Convincing HCFA to move a number of procedures from a list of procedures for which Medicare payment would only be made if performed on an inpatient basis to a list that permits those operations to be performed in either the inpatient or outpatient setting.
- Supporting surgeons seeking accreditation in local markets to perform procedures or use technology for which they are well trained and competent.

Guiding principles for the future

If we are truly going to represent the surgical patient and be the embodiment of the surgical profession's values, we must represent the profession in totality. To that end, we must diligently work with all specialty societies and other organizations that support the surgical patient, such as the American Society of Anesthesiologists, the American Board of Medical Specialties, the Council of Medical Specialty Societies, and many others.

As we plan for the future and strengthen our programs, four overarching goals are foremost in our minds: (1) improving the care of the surgical patient by putting real meaning behind being a Fellow of the American College of Sur-

geons; (2) making the College a true umbrella organization, representing the surgical patient and all surgeons; (3) broadening our educational and research programs; and (4) offering new and innovative services that will assist surgeons in better serving their patients. With your help, support, and suggestions, much of what we have done will be strengthened, and we will be able to continue to work toward reaching these goals.

Thomas R. Russell, MD, FACS

If you have comments or suggestions about this or other issues, please send them to Dr. Russell at fmp@facs.org.

Dateline Washington

prepared by the Washington Office, Health Policy and Advocacy Department

GAO releases report critical of NPDB

On November 30, 2000, the U.S. General Accounting Office (GAO) released a report titled *National Practitioner Data Bank: Major Improvements Are Needed to Enhance Data Bank Reliability,* which was issued in response to a request from Rep. David McIntosh (R-IN). The report takes a critical look at the operations of the National Practitioner Data Bank (NPDB), which contains information about malpractice and adverse licensure and privileging actions taken against physicians and other health care providers. The report addresses issues related to data bank financing and to the accuracy of the information contained in the data bank. It comes at a time when some members of Congress are calling for making data bank reports accessible to the public, despite repeated efforts by the College and others to urge a closer examination of data bank operations.

In its report, the GAO noted that there has been no examination of whether the required user fees charged to physicians and other health care entities to query the data bank are appropriate. In addition, the GAO found that the Health Resources and Services Administration (HRSA), which administers the NPDB, cannot be assured that it is receiving all fees it is due, nor can it ascertain whether these collections stem from the NPDB or a separate clearinghouse it operates—the Healthcare Integrity and Protection Data Bank. The report goes on to note that at the end of fiscal year (FY) 1999, the NPDB had \$6.8 million in cash reserves, up from \$3.1 million at the end of FY 1998.

Additionally, the GAO described a variety of problems associated with the quality of the data in the NPDB. For example, the report stated that "[a]lthough HRSA has been concerned that malpractice payments are underreported, it has not been able to determine the magnitude of the problem despite many years of effort." In addition, the data collected are often incomplete and inaccurate, and specific problems were identified in each of the three major data sets. The GAO also noted that HRSA has not implemented a 13-year-old law that expands the NPDB to include information on nurses and other health care practitioners.

One of the many recommendations made by the GAO is that HRSA "revise NPDB user and practitioner notifications to include disclosures on the limitations of the data and warnings regarding duplicate submissions as an interim measure until procedures to monitor data quality are implemented." The entire report can be viewed on the GAO's Web site at http://www.gao.gov.

Labor Department issues rules regarding patients' rights

The Department of Labor (DOL) issued regulations on November 20, 2000, establishing certain patients' rights in appealing coverage determinations by health insurance plans. The regulations extend protections to more than 130 million Americans in employer-based health plans and will take effect in January 2002. Issued partly in response to unsuccessful attempts by Congress to pass more comprehensive patient protections, the scope of the DOL regulations is limited by current law, and they are not intended to take the place of

broader legislation. More specifically, the regulations pertain to the right of patients to appeal health plan determinations and do not address issues such as access to care and health plan liability.

The new rules set forth specific restrictions on health plans when they review decisions to deny benefits. Plans will be required to rule within 15 days for initial pre-service claims and 30 days for post-service claims. Plans also will be required to complete their appeals process within 30 days for pre-service claims and 60 days for post-service claims. Urgent care cases must be decided within three days.

In addition, patients must be given meaningful information about their rights under the appeals process. Health plans will not be allowed to charge them for appealing plan determinations, and notices of adverse benefit determinations must include the specific reasons for denying the claim.

Medicare revises "inpatient only" list

On November 13, 2000, the Health Care Financing Administration (HCFA) published a regulation making a number of revisions in Medicare's newly implemented hospital outpatient payment system. In response to comments received from the College and other organizations, the agency announced the deletion of 44 codes from its "inpatient only" list, thereby permitting these procedures to be performed on Medicare patients in both outpatient and inpatient settings. Among the procedures deleted from the payment restriction list were: 19240, modified radical mastectomy; 60212, 60252, 60260 and 60512, all thyroid or parathyroid procedures; and 35458, transluminal balloon angioplasty of the brachiocephalic trunk or its branches. The changes in the inpatient only list will take effect on January 1, 2001, after which Medicare plans to update the list on a quarterly basis.

HCFA renews "Centers of Excellence" demo project

HCFA is inviting interested hospitals in Illinois, Michigan, and Ohio to participate in a Medicare "Centers of Excellence" demonstration project for certain cardiovascular and major joint replacement procedures. Through the project, bundled Part A (facility) and Part B (physician) payments will be provided to participating hospitals to determine if cost savings and quality improvements will occur for selected high-volume, costly procedures—coronary artery bypass graft surgery, cardiac valve operations, angioplasty, and total knee and hip replacements.

The first such demonstration projects were initiated in 1991 for cardiac bypass and cataract procedures. According to HCFA, the heart bypass project saved Medicare more than \$40 million for the 10,000 coronary artery bypass graft operations performed at seven participating sites. The cataract surgery alternative payment demonstration, implemented in three cities and four sites, is said to have saved \$500,000 for approximately 7,000 procedures. Additional information is available at http://www.hcfa.gov/ord/projdfs.htm.

What surgeons should know about...

The 2001 Medicare fee schedule

by Cynthia A. Brown, Associate Director, Health Policy and Advocacy Department

he Health Care Financing Administration (HCFA) issued a final regulation on November 1, 2000, outlining changes in Medicare physician payment policies for 2001. In contrast to recent years, the combined impact of all the policy modifications that took effect this year produced at least modest average gains in Medicare income for the majority of medical and surgical specialties. These gains are projected to occur despite the fact that resource-based practice expense relative value units (RVUs) continue to decrease for many procedures as they are phased in to the fee schedule (see Table 1, p. 9). Following is a more detailed discussion of the new policies and fee schedule changes set forth in the regulation, and of the impact these revisions are expected to have on surgical specialties.

What is the fee schedule conversion factor for 2001, and how does it compare with last year's?

The Medicare physician fee schedule conversion factor was increased 4.5 percent in 2001 to \$38.2581, up from \$36.6137 in 2000.

Where are we in the process of transitioning to resource-based practice expense RVUs?

We are now in the third year of a fouryear transition to new practice expense RVUs, with 75 percent of practice expense payments based on resource-based values and 25 percent on RVUs that were effective in 1998. In 2002, Medicare physician payments will be entirely "resource-based." At least for the present, however, the new practice expense RVUs are considered "interim," meaning that they are subject to changes resulting from data refinements, adjustments to the methodology, the availability of new information, and so forth. In fact, Medicare law specifies that the resource-based values are supposed to be refined on a continuing basis throughout the transition period.

What will the ultimate impact on my Medicare payments be when the final practice expense values take effect in 2002?

Table 2 on page 9 provides estimates of • the full impact that the move to resource-based practice expense RVUs will have on average Medicare income for the surgical specialties. These figures are based on estimates provided by HCFA in various Medicare fee schedule regulations issued for 1999, 2000, and 2001, which were later combined. As a result, they should be viewed with some caution; figures were displayed to varying levels of precision in the different years, making accurate projections of the cumulative effect problematic. Further, as is always the case, the actual impact on an individual surgeon's income can vary significantly from the average calculated for the relevant specialty, depending on the mix of services he or she provides. (Orthopaedic surgeons who practice primarily in facility settings and perform a high volume of major joint procedures, for example, are likely to experience steeper cuts than shown on this table.)

Table 1			
Estimated net change in Medicare payments between 2000-2001 for selected specialties			
Surgical enocialties			
Surgical specialties Cardiac surgery	-1%		
General surgery	2		
Neurosurgery	1		
Obstetrics/gynecology	6		
Ophthalmology	6		
Orthopaedic surgery	4		
Otolaryngology	7		
Plastic surgery	6		
Thoracic surgery	-1		
Urology	6		
Vascular surgery	1		
Other specialties			
Anesthesiology	2%		
Cardiology	1		
Emergency medicine	2		
Family practice	6		
Gastroenterology	0		
Internal medicine	5		
Pathology	2		
Radiology	2 2		

The College and other medical and surgical specialty societies have expressed serious concern in recent years over the poor progress HCFA seems to have made in refining the data used to calculate resource-based practice expense RVUs, even though the agency is required by law to make such refinements during each year of the four-year transition period. Were any sig-

Table 2 Impact of practice expense RVU changes for surgical specialties			
Specialty	Cumulative 1999-2002 impact		
Cardiac surgery General surgery Neurosurgery Obstetrics/gynecology Ophthalmology Orthopaedic surgery Otolaryngology Plastic surgery Thoracic surgery Urology Vascular surgery	-21% -7 -12 5 6 -2 9 5 -18 7		

nificant improvements made to the data for 2001?

Yes. The 2001 fee schedule reflects what is perhaps the most significant refinement yet made to the data HCFA used to develop resource-based practice expense RVUs. As first proposed by the College during the practice expense review process conducted by the American Medical Association (AMA)/Specialty Society RVS Update Committee (RUC), estimates of the clinical staff costs associated with 15 major evaluation and management services were reduced. Together, these services account for approximately one-quarter of Medicare physician billings. As a result of this data edit, hundreds of millions of dollars were redistributed to other services, mitigating somewhat the practice expense payment reductions that continue to be phased in for many procedural services.

In addition, the RUC made recommendations for clinical staff, supply, and equipment inputs for dozens of CPT codes that were adopted by HCFA.

What other significant changes were made to the practice expense data?

Aggregate specialty-specific practice cost data from the AMA's Socioeconomic Monitoring System (SMS) are used to determine each specialty's practice expense "pool" before procedure-specific and general overhead costs are allocated down to the procedure code level. For 2000, data from the 1997 SMS data were used to establish these specialty pools. This year, HCFA changed its methodology and used a four-year average of the SMS data collected in1995-1998.

While this change may enhance the stability of the data, it has raised problems for some specialties. Cardiothoracic surgeons, for example, conducted additional surveys in 1999 using the SMS methodology in order to increase the sample size for their specialty. As a result of these improved data, the practice expense pools HCFA assigned to cardiac and thoracic surgery were increased for 2000. However, under the four-year averaging method used this year, the positive effects of these data improvements were diluted substantially. Cardiac and thoracic surgeons are the specialties hit hardest by this change in methodology.

As a result of using the four-year averaging method, HCFA estimates that nine specialties will experience a positive or negative impact of approximately 1 percent; four specialties show a payment impact of about 2 percent.

Vascular surgeons comprise a relatively small specialty that is acknowledged to be underrepresented in the aggregate practice cost data collected through the SMS. What considerations has HCFA made for this specialty?

HCFA used data collected through a joint survey conducted by the American Association of Vascular Surgery and the Society for Vascular Surgery to supplement the information already in-hand. As a result, HCFA's estimate of the practice expense per hour figure for vascular surgery increased 18 percent, from \$63.80 to \$75.10.

Some specialties have argued pointedly during the practice expense refinement process that HCFA made a serious error in 2000 when it eliminated from its data base the costs incurred by physicians when clinical staff employed by them provide services in facility settings. How was this issue addressed in the final rule?

Several specialty societies, including the College, opposed these data edits, arguing that, at the very least, they should be postponed until additional facts can be collected. However, HCFA maintains that where the use of such staff is not separately billable, they are covered by Medicare's diagnosis-related group (DRG) payments. Consequently, the agency still has not restored these cost estimates to the practice expense data base.

HCFA agreed, however, that it would be helpful to determine whether hospitals are, in fact, still providing the staffing that is assumed in their DRG payments. To that end, the agency has asked the Office of the Inspector General to conduct a specific, independent assessment of staffing arrange-

ments between hospitals and thoracic surgeons. (Thoracic surgeons have submitted data estimating that 74 percent of them employ clinical staff who assist in the hospital.)

It is disturbing that many refinement issues remain at this point in the transition process, when three-quarters of physician practice expense payments are based on these new "resource-based" values. What does the future hold for meaningful refinement?

HCFA stated in the rule that, so long as there remains a "good faith effort" among all parties, it will not close the door on further codelevel practice expense RVU refinements when the transition period ends in 2002. Also, the agency is required by law to review and make adjustments to the practice expense values five years after they take full effect—that is, no later than 2007.

Medicare payments are adjusted to reflect area cost differences through geographic practice cost indices (GPCIs) that have been established for each of the three fee schedule components (physician work, practice expenses, and malpractice expenses). In addition, HCFA is required by law to review and make changes to these indices at least once every three years. The GPCIs were last changed in 1998; what changes were made this year and what is the estimated impact?

This year, the GPCIs were changed to reflect more current data on rents and malpractice expenses. Because more than a year has elapsed since the last GPCI revision, these changes will be phased in over a two-year period. Accord-

ing to HCFA, only 14 of the 89 fee schedule areas will change by two percent or more; 16 others will change by 1 to 1.9 percent. The remaining 59 areas are estimated to experience payment changes of less than 1 percent under the revised GPCIs.

In 2000, resource-based malpractice RVUs were incorporated into the Medicare fee schedule. Have any changes been made to those values?

The malpractice RVUs were revised slightly this year to reflect more current data on premium costs. In addition, HCFA accepted a recommendation made by the College and the Society for Surgical Oncology and has now "crosswalked" surgical oncology to general surgery for the purpose of estimating the specialty's malpractice risk factor, rather than to a lower "all physician" average as it did originally.

HCFA estimates that the malpractice RVU changes will have little impact on specialty level payments. Across the 62 specialties shown by HCFA in the regulation, the overall impact is projected to be 0.0 percent.

How will all these changes in data and methodology, combined with the conversion factor increase, actually affect Medicare payments for important surgical services?

Table 3 on page 12 shows national average payment amounts in 2001 for selected high-volume surgical services provided by a number of specialties.

For 2000, HCFA reduced work RVUs for certain critical care codes because

Table 3 Medicare payments for selected high volume surgical services 2000-2001: National averages				
СРТ	Procedure	2000 payment	2001 payment	% change
19240	Removal of breast	\$ 995	\$1,030	3.5%
27130	Total hip replacement	1,542	1,574	2.1
27244	Repair of thigh fracture	1,187	1,172	-1.3
27447	Total knee replacement	1,631	1,655	1.5
33512	CABG, three-vein	2,273	2,217	-2.5
35301	Rechanneling of artery	1,236	1,228	-0.1
44140	Partial removal of colon	1,124	1,143	1.7
49505	Repair inguinal hernia	418	427	2.2
52601	Prostatectomy (TURP)	850	844	-0.1
63047	Removal of spinal lamina	1,136	1.143	0.1
66821	After cataract laser surgery	182	212	16.5

748

of changes that were made in their CPT definitions. The College and others argued against that change. Did HCFA reconsider its decision?

Remove cataract, insert lens

66984

Yes. The CPT language describing critical care was again revised, so HCFA reversed its decision and reinstated the work RVUs for these two codes. Beginning in 2001, physician work RVUs will again be 4.0 for CPT 99291, and 2.0 for CPT 99292. (For 2000, the work values for these codes were 3.6 and 1.8, respectively.)

In a proposed rule issued last July, HCFA announced its plans to create new HCFA Common Procedure System (HCPCS) codes to describe care plan oversight and physician certification or recertification of home health services, because of its concern that anticipated CPT coding changes would be inconsistent with Medi-

care coverage criteria for these services. Did the agency go ahead with this plan?

-0.0

745

Yes. HCFA finalized its proposal for four new "G" codes:

- G0181—physician supervision of a patient receiving Medicare-covered services from a participating home health agency.
- G0182—physician supervision of a patient receiving Medicare-covered services from a Medicare participating hospice.
- G0180—physician services for initial certification of Medicare-covered home health services.
- G0179—physician services for recertification of Medicare-covered home health services.

Responding to comments made by the College, the final rule clarifies that surgeons who provide certification or recertification services for home health care will, in fact, be allowed to report the applicable codes even if the care is related to an operation and even if this is done during a global service period.

In the July proposed rule, HCFA announced plans to correct an inconsistency between the RVUs assigned to observation care codes and Medicare policies pertaining to reimbursement for hospital admissions and discharges occurring on the same day. What policies were set forth in the final rule?

Based on comments, HCFA refined its proposal as follows:

- HCFA will pay for both inpatient hospital admission services (CPT codes 99221-99223) and hospital discharge services (CPT codes 99238 and 99239) for patients in the hospital for 24 hours or more.
- To appropriately report CPT codes 99234-99236 to Medicare, the patient must be an inpatient or be under observation care for a minimum of eight hours on a single calendar date.
- No discharge service payment will be allowed for patients under observation in the hospital less than eight hours. For these patients, physicians should report CPT codes 99218-99220.
- For patients admitted for observation care and then discharged on a different calendar date, codes 99218 through 99220 should be used for the first day, with observation discharge code 99217 for the second day.
- For those admitted to inpatient hospital care and then discharged on a different calendar date, codes 99221 through 99223 should be used with discharge day management codes 99238 or 99239.
- For inpatient admission and discharge less than eight hours later on the same calendar date, codes 99221 through 99223 should be used. Hospital discharge day management service codes should not be used.

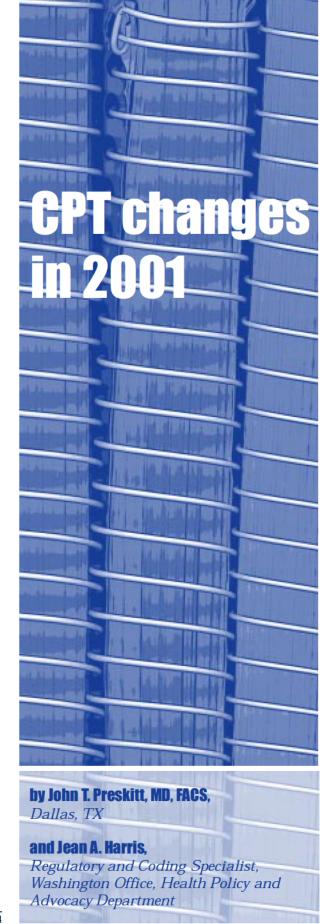
Physicians must satisfy the documentation requirements for both admission to and discharge from inpatient or observation care in order to bill CPT codes 99234-99236. The length of time for

observation care or treatment status must also be documented.

HCFA anticipates little financial impact from these coding rules, except for those few physicians who actually have been billing 99234-99236 for stays less than eight hours.

Last July, HCFA proposed to change the global period for certain CPT codes that involve the insertion, removal, and replacement of pacemakers and cardioverter defibrillators from 90 days to zero days, with a concurrent reduction in work and practice expense RVUs to reflect the lack of postoperative care associated with the service. Did the agency make this change?

As a result of comments received on the proposed rule, this change was not made. The global period for these services remains at 90 days, and no reductions were made in the RVUs.



his article covers changes in *Current Procedural Terminology 2001* (CPT) that are of special interest to general surgeons and their staffs. The changes are presented in code sequence to facilitate finding frequently performed procedures. This article provides CPT coding rules. Each insurance plan determines payment policies unique to that plan; therefore, the payment rules for a given plan may be different from those reported here.

If your practice reports home health care plan oversight codes or observation care codes to Medicare, you should read "What surgeons should know about...The 2001 Medicare fee schedule" on pages 8-13 in this issue of the *Bulletin*. The Health Care Financing Administration (HCFA) has established separate HCFA Common Procedure System (HCPCS) codes for care plan oversight and has announced policies for using the observation care codes (codes 99217-99220 and 99234-99236) that are not reflected in CPT.

Wound repair

Revisions have been made in the notes for both excision of malignant skin lesions (codes 11600-11646) and repair or closure of wounds (codes 12001-13160) to clarify two aspects of the closure of wounds. The first is that excision of a malignant skin lesion includes simple repair (one-layer closure), but repair by intermediate closure (layered closure) or complex closure (more than layered closure) is reported in addition to the excision of a malignant lesion. The second is to clarify the meaning of creation of a defect in the notes for repair of a wound. Excision of a scar requiring complex repair has now been added to the notes as an example of creation of a defect for repair.

Note also that two new codes for selective and non-selective debridement without anesthesia (codes 97601 and 97602) have been added to report services generally performed by physical therapists and other nonphysician practictioners. The debridement of wounds by surgeons continues to be properly reported with a code from the range 11040-11044.

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Skin grafts

Since 1999, CPT has directed physicians to use codes 15000-15121, split-thickness skin grafts, to report use of tissue cultured skin grafts, including a bilaminate skin substitute or neodermis. Now there are two new CPT codes for the application of a bilaminate skin substitute or neodermis. They are code 15342, Application of bilaminate skin substitute/neodermis; 25 sq cm, and code 15343, Application of bilaminate skin substitute/neodermis; each additional 25 sq cm. Code 15000, Surgical preparation or creation of recipient site by excision of open wounds, burn eschar, or scar (including subcutaneous tissues); first 100 sq cm or one percent of body area of infants and children, should be used to report initial wound preparation. Code 15343 is an add-on code for the intraoperative work of the additional area, so the multiple procedure modifier (-51) should not be used and the value of the procedure should not be discounted.

Medicare established codes for 2000 in HCPCS for reporting the application of tissue cultured skin grafts including site preparation. Those codes (G0170 and G0171) are being deleted, and CPT codes are to be used instead, including the use of code 15000 for the initial wound preparation.

Local treatment of burns

Code 16035, *Escharotomy*, has been revised to read *Escharotomy*; *initial incision* and code 16036 has been added for each additional incision. Code 16036 is an add-on code for the intraoperative work of the additional area, so the multiple procedure modifier (-51) should not be used and the value of the procedure should not be discounted.

Breast biopsy

The existing code for a percutaneous needle core biopsy was split into two: a new code using imaging guidance (19102) and a revised code not using imaging guidance (19100). There also is a new code 19103, *Biopsy of breast; percutaneous, automated vacuum assisted or rotating biopsy device, using imaging guidance.* The vacuum assisted device is called a Mammotome and the rotating biopsy device is called an ABBI. Code 19125, *Image guided placement, metallic localization clip, percutaneous,*

during breast biopsy, was added to recover the fairly substantial expense of the clip when it is supplied by the surgeon rather than because of the work involved in placing the clip. Finally, a number of editorial changes were made, primarily to designate certain procedures as open. For imaging guidance, code 76095 for stereotactic localization, code 76096 for mammographic guidance, or code 76942 for ultrasonic guidance should be used.

There are errors in the cross-reference notes in both the surgery section and the radiology section. We believe that the changes described below are correct, although they have not yet been approved for inclusion in CPT. In the surgery section, the entire third note under code 19100 should be deleted since the procedure does not use imaging guidance. In the existing cross-reference under code 19103, code 76096 should be added to the note. Under code 19291, the note on radiological supervision and interpretation should include codes 76095 and 76942. Under code 19295, the cross-reference should be to code 19103 in addition to code 19102. In the radiology section, the first cross-reference under code 76095 should not include code 19100. In the first cross-reference under code 76096, code 19000 should be deleted.

Anterior approach to the spine

For a long time, there has been confusion over how general and thoracic surgeons should report doing the anterior approach to the spine. Historically, three methods of reporting the services have been used. Both the surgeon doing the approach and the spine surgeon reported the definitive procedure with the co-surgeons modifier attached (modifier -62); the approach surgeon reported an exploratory thoracotomy (code 32100), exploratory laparotomy (code 49000), or exploration of the retroperitoneal area (code 49010) and the spine surgeon reported the definitive procedure; or the approach surgeon used an unlisted procedure (codes 22899, 22999, 32999, or 49999) and the spine surgeon reported the definitive procedure.

In the notes in the spine section (musculoskeletal system) for 2001, there is an explanation of the correct way to report an anterior approach. Under this description, both the approach and the spine surgeons should use the definitive procedure code with a co-surgeon modifier (modifier -62). This

applies to codes 22112-22114, 22222-22224, 22556-22558, 22808-22812, 63077, 63085, 63087 and 63090.

Each of the code families has an add-on code for each additional interspace or each additional segment. If performed, this is to be reported by the spine surgeon. For example, both the approach surgeon and the spine surgeon may report a minimal diskectomy (code 22558-62) but only the spine surgeon may report the additional interspace code and a code for an allograft. Unfortunately, CPT used confusing language in explaining how the add-on codes are to be reported, but the example in CPT provides correct guidance. The modifier *cannot* be attached to the codes for the additional levels; those are codes 22116, 22226, 22585, 63079, 63086, 63088 and 63091.

Endovascular repair of AAA

A new section of CPT has been added to describe the endovascular repair of an infrarenal abdominal aortic aneurysm (AAA) or dissection. When used with pre-existing catheter codes and new fluoroscopic guidance codes, it is possible to completely describe the placement of various prosthetic devices. There are also codes for the open repair of an infrarenal abdominal aortic aneurysm or dissection following a failed endovascular repair. The 12 codes in the new section include all catheter manipulations necessary in placing the endoprosthesis and balloon angioplasty within the endovascular site to assure full expansion of the endoprosthesis.

There are three new codes for reporting the repair itself: code 34800 using an aorto-aortic tube prosthesis, code 34802 using a modular bifurcated aortic prosthesis (one docking limb), and code 34804 for use of a unibody bifurcated prosthesis. There are two codes for placement of an extension of a prosthesis. Code 34825 is for placement of a proximal or distal extension of the prosthesis in the initial vessel and code 34826 is an add-on code for placement of an extension in each additional vessel.

The aortic endograph procedure begins after placement of appropriate guidewire catheters and performance of the "roadmapping" aortogram prior to deployment of the endoprosthesis. Existing catheterization codes (code 36200, 36245, and so on) are used to report these maneuvers. There are two new codes for reporting the open exposure

of the iliac artery (code 34820) or femoral artery (code 34812) when needed to allow passage of the endovascular prosthesis. Both of these codes are unilateral. There are two new add-on codes to report the endovascular placement of an iliac artery occlusion device (code 34808) and the placement of a femoral-femoral prosthetic graft (code 34813).

The new section on endovascular repair of an AAA also contains three codes for the open repair following a failed endovascular repair, including the repair of arterial trauma from the failed procedure. They are code 34830 when a tube prosthesis is used for the repair, code 34831 for use of an aorto-bi-iliac prosthesis, and code 34832 for use of an aorto-bifemoral prosthesis.

For fluoroscopic guidance, two new codes have been added. Code 75952 is for angiography of the aorta during the basic repair (procedures 34800-34808) and code 75953 is for angiography during the placement of an extension prosthesis (procedures 34825 and 34826).

Percutaneous arteriovenous fistula

Code 36870 was added for percutaneous thrombectomy of an arteriovenous fistula with an autogenous or nonautogenous graft, including mechanical thrombus extraction and intra-graft thrombolysis. This caused an editorial revision to three similar existing codes to make it clear that they are open procedures. They are codes for thrombectomy of a dialysis graft without revision (code 36831), revision of a dialysis graft without thrombectomy (code 36832), and revision of a dialysis graft with thrombectomy (code 36833). Those three codes are designated "separate procedure," which means they can only be used to report things that are not part of a bigger procedure.

Biopsy or excision of lymph nodes

The code for the biopsy or excision of superficial lymph nodes (code 38500) and the code for biopsy or excision of internal mammary node(s) (code 38530) have had the designation "separate procedure" removed to permit reporting a sentinel lymph node biopsy. The term "separate procedure" means that the code is an integral part of a total procedure and that both the component part of the procedure and the total procedure cannot be re-

ported together. Notes were added to continue the prohibition on reporting both the component part and the total procedure together. Code 38500 is not to be reported with radical lymphadenectomies (38700-38780) and code 38530 is not to be reported with a more limited range of lymphadenectomies (codes 38720-38746).

Intestinal transplantation

Four codes were added for intestinal transplantation. There are two codes for donor enterectomy with preparation and maintenance of the allograft—code 44132 is from a cadaver donor, and code 44133 is a partial allograft from a living donor. There are two parallel codes for intestinal transplantation from a cadaver donor (44135) and from a living donor (44136).

Endoscopies of the small bowel and rectum

A total of seven codes were added to various endoscopies of the small bowel and rectum for transendoscopic stent placement. The codes are 44370, 44379, 44383, 44397, 45327, 45345, and 45387. As with all endoscopies, a diagnostic endoscopy is always included, and the new codes include predilation of the stent placement site.

Two codes also were added to the flexible sigmoidoscopy family of codes. Code 45341 is for a sigmoidoscopy with endoscopic ultrasound examination. Code 45342 is for a transendoscopic ultrasound-guided fine-needle aspiration or biopsy. The fine-needle aspiration or biopsy may be performed within the rectum or through the rectum wall. Again, a diagnostic endoscopy always is included with both codes and code 45342 is only reported once, regardless of how many biopsies are taken.

Laparoscopic procedures

Code 47379, Unlisted laparoscopic procedure, liver was added. This procedure code should be used any time a procedure not listed in CPT is done. For example, performing laparoscopic radio-frequency ablation of hepatic tumors would be reported using this code. Always submit an operative note and any other documentation the insurance company wants with the claim.

The family of codes starting at 49320 is revised

to clarify that 49320 is a diagnostic procedure and the remaining codes in the family are surgical in nature. A new code, 50545, was added for a radical nephrectomy performed laparoscopically. It includes removal of Gerota's fascia and surrounding fatty tissue, removal of regional lymph nodes and an adrenalectomy. The existing code for a nephrectomy (50546) was modified to include a partial ureterectomy.

Stress incontinence

A new code 57287, Removal or revision of sling for stress incontinence (e.g., fascia or synthetic), was added.

Operating microscope

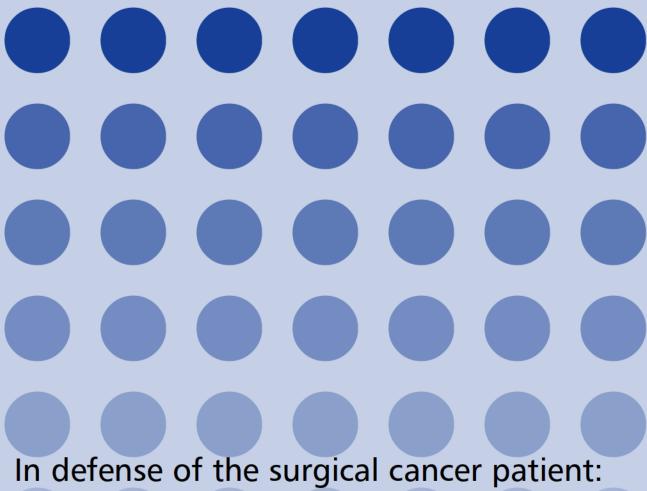
Code 69990, *Use of operating microscope*, is an add-on code for the use of the operating microscope. However, it is not to be used when the use of the operating microscope is included in the substantive procedure; the notes for code 69990 list the codes that include the use of the operating microscope. Code 15842, *Graft for facial nerve paralysis; free muscle graft by microsurgical technique*, has been in CPT for some time but has just now been added to the list of codes in the notes.

Altered surgical field modifier

A new modifier (modifier -60) has been established to report that a surgical procedure involved continued on page 48

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urrently, over 80 percent of cancer patients undergo surgery as the sole or major component of their therapy, and relative to non-cancer patients, appear to be at increased risk for postoperative morbidity and mortality. It has long been held that the act of abdominal surgery, "letting the air inside," increases the risk for metastatic disease and morbidity through some unknown immunosuppressive event. Thus, it has been proposed that surgical injury in the presence of cancer and in association with malnutrition adversely affects the immune system, increasing the risk of sepsis and progression of metastatic disease.1

The metabolic response to a major operation is characterized by neuroendocrine stimulation, which is driven by the magnitude of the operative procedure, the host's physiologic and nutritional state, and the degree of bacterial contamination. Net-negative nitrogen balance of some duration is the ultimate result. The immunologic impairment affects both specific and nonspecific host defense systems including cell-mediated and humoral immunity. T-cell functions, nonspecific neutrophil functions, and natural killer cell activity, as well as antigen presentation and immunoglobulin synthesis, are all adversely affected. Complement activation and prostanoid production by monocytes are increased following injury. The etiology of perioperative immunosuppression is multifactorial and may be due to the type and degree of operative injury, anesthesia, blood transfusion, the type of malignancy, and the patient's age and nutritional status. In terms of T-cell mitogenesis, the duration of an operation is the most significant factor adversely affecting T-cell function. The mediators of immune dysfunction relate to a variety of substances such as wound factors, bacterial products, prostanoids, neuroendocrine hormones, and medications.

The macrophage is one component of many different host defense mechanisms. Its functions include phagocytosis and killing of microbes, the presentation of antigen to lymphocytes, and the release of cytokines which serve both autocrine and paracrine functions. Macrophage functions include both effector and immunoregulatory roles. Effector functions may be antibacterial, antitumoral, or part of the tissue modeling process that occurs with wound healing and repair. In the immunoregulatory system, they act in processing antigen and presenting it to T cells, as well as contributing to natural killer cell interactions and other T-cell functions. They produce a variety of products from enzymes to cytokines and to reactive oxygen intermediates, which may cause organ dysfunction when released in large quantities. Experimentally, the magnitude of injury affects the degree and duration of macrophage dysfunction as measured by the cell's ability to kill microorganisms.

In the process of antigen presentation, the macrophage produces a variety of cytokines, which act to stimulate or to suppress certain T-cell functions. Prostaglandin E2, interleukin (IL)-10, reactive nitrogen intermediates, and transforming growth factor (TGF)-beta for example can direct the type of immunologic response that will occur. Following injury, the T-helper-1 response appears to be diminished, with decreased production of interferon-gamma. In contrast, the T-helper-2 response after injury is markedly increased with greater production of IL-4 and IL-10. In traumatized animals who are infected with Candida albicans one week after injury, survival is significantly impaired compared with animals who have not been injured but have been infected with Candida albicans.

Another co-existing problem in many cancer patients is that of severe malnutrition, which is the most common form of secondary immunosuppression. Preoperative weight loss is known to correlate with postoperative mortality. In 1988, Windsor and Hill evaluated the relationship of body composition to physiologic function. They noted that body compositional changes in malnutrition included a decrease in lean body mass and a relative increase of extracellular water. Grip strength was decreased. Respiratory function and the ability to cough and clear tracheobronchial secretions were also impaired. In individuals who

underwent GI surgery, the incidence of atelectasis between well-nourished and malnourished patients was approximately the same, 20/41 (well-nourished) and 16/39 (malnourished) patients. Of those patients who developed atelectasis postoperatively, 15 percent of well-nourished patients developed pneumonia, whereas 50 percent of those who were malnourished and had atelectasis developed pneumonia and, as a consequence, had an extended length of hospital stay. Thus, body compositional and physiologic studies correlate with postoperative clinical outcome.

Immunologic impairment in malnutrition includes a decrease in a variety of cellular functions: T-cell mitogenesis, cytotoxic T-cell activity, natural killer (NK) activity, and lysozyme production.4 In addition, there is a diminution of delayed cutaneous hypersensitivity, complement production, and immunoglobulin synthesis. These effects are quite similar to the effects of injury. In chronic malnutrition in a murine model, the ability of peritoneal macrophages to produce superoxide and tumor necrosis factor (TNF)-alpha decreases over a period of time.5 When animals are placed back on a normal diet, it requires 10 days before there is return to normal function. If this was caused by a simple nutrient deficiency or an enzyme deficiency, one would assume that within 24 hours of ingesting a normal diet, these cellular functions would be improved. Why does it take 10 days to return to normal, and what is the relationship of this time requirement to that which we see in the clinical situation in hospitalized patients receiving nutritional support? Multiple studies suggest that there is a neuroendocrine response to malnutrition that is similar to the neuroendocrine response to injury with increasing catecholamines and cortisol. This neuroendocrine reaction is responsible partly for macrophage or monocyte dysfunction. These results suggest a reason whereby early replenishment with nutrients fails to rapidly return immune function to normal. In summary, biologic cell studies such as macrophage cell functions correlate with body compositional studies, which correlate with clinical outcome.

There appear to be two major etiologies of malnutrition in cancer patients. The first type is that which occurs due to therapy such as radiation treatment or to upper gastrointestinal partial obstruction secondary to the malignancy itself. There is a second type, which parallels the stage or type of malignancy. The second type produces cancer cachexia in which anorexia, weight loss, and abnormal protein, carbohydrate, and fat metabolic responses occur. Indeed, the host response in cancer cachexia is similar to that which occurs in infection, oxygen toxicity, or after injury.

In terms of protein metabolism, there is an increase in whole body and liver protein synthesis, an increase in skeletal muscle breakdown, and a decrease in skeletal muscle synthesis and nitrogen balance. ^{6,7} This leads to a decrease in skeletal muscle strength. In terms of carbohydrate metabolism, there is an increase in glucose production as well as consumption, and there are increases in Cori cycle activity. There is a decrease in glycogen synthesis and storage and a decrease in the peripheral insulin effect. In terms of lipid metabolism, there is an increase in serum lipid and triglyceride levels, with a decrease in total body fat stores due to an increase in fat breakdown.

These metabolic responses appear to be due not specifically to the tumor itself, but to the reaction of the host to that tumor and the production of a variety of circulating factors such as TNF-alpha, IL-1, IL-6, or interferon gamma, a neuropeptide, leukocyte inhibitory factor, or a newly identified 24 kilodalton proteoglycan. Blocking these products using monoclonal antibodies to these cytokines experimentally in animal models has improved the metabolic pattern that occurs in the tumor-bearing host. 9,10

A variety of studies have also demonstrated monocyte or macrophage dysfunction in the tumor-bearing host. These cells show decreased ability to kill microorganisms intercellularly and to migrate and chemotax properly. These effects relate to the autocrine production of prostanoids, IL-10, TGF-beta, and other substances. If one looks histologically at solid tumors, while there may be an infiltration of macrophages within the tumor itself, those macrophages do not seem to work very well. The question is, why?

In experimental studies, we implanted either a B-16 melanoma or a K-1735 melanoma subcutaneously and, after a period of time, harvested peritoneal macrophages. Macrophage-mediated cytotoxicity was dramatically reduced in the tumorbearing host, in the absence of cachexia, weight loss, injury, or malnutrition. We then went on to

investigate the etiology of this macrophage dysfunction. In Transwell studies, there was a marked decrease in cellular function as measured by macrophage nitrite production. Using melanoma-conditioned media, the ability of macrophages to produce nitrate was similarly decreased. A substance less than 100 kilodaltons appears to be secreted by tumor cells and is at least partially responsible for macrophage dysfunction.

If malnutrition, cancer, and injury often occur together, what is the role of nutritional support in trying to alter biologic or clinical outcome in cancer patients undergoing major operations? In the mid-1960s, Dudrick and others demonstrated that one could promote growth and positive nitrogen balance by providing nutritional support entirely by vein. 11 This landmark study changed the way that we would care for patients. Copeland and others demonstrated that there was a very low complication rate with central venous catheterization, particularly when a team approach was used in providing parenteral nutritional support. 12 Early trials demonstrated a variety of efficacious biological outcomes that could be measured in these patients receiving parenteral nutrition. Weight gain, positive nitrogen balance, the ability to increase serum protein levels or improve muscle strength, and substrate kinetics were documented. Early studies also indicated that postoperative outcome was improved in high-risk patients. These retrospective studies translated into a whole series of prospective randomized trials involving patients receiving surgical, medical oncology, and radiation treatment, which looked at the efficacy of parenteral nutritional support. 13-16 Only a few of these prospective trials demonstrated efficacy in terms of mortality and tumor response to treatment.

We could summarize studies in the 1970s and 1980s by noting that in cancer patients, total parenteral nutrition (TPN) had positive effects on body composition, with gains in body nitrogen and glycogen and a dramatic gain in body fat. Clearly, there was biologic value, but there was not clinical or tumor response improvement in those who received routine intravenous nutritional support. This paradox led to a whole series of trials, which investigated specific nutrients that might alter the host immune response.

Arginine is a nonessential amino acid that has metabolic, hormonal, immunologic, and cytotoxic

effects. Arginine is part of the urea cycle which produces ornithine, citrulline, and reactive nitrogen intermediates. 17,18 Arginine appears to be an important amino acid, and, under certain conditions, cells require it to adequately function. It has specific cellular immune effects that appear to counteract those effects due to trauma, malnutrition, and the presence of cancer. Thymic size and cellularity are improved and lymphocyte mitogenic responses are increased. There is a substantial increase in macrophage tumor cytotoxicity, NK cell cytotoxicity, and the ability of lymphocytes to produce IL-2 when arginine is administered in controlled laboratory studies. Results from the animal laboratory led to a series of human studies in which enteral diets containing a variety of different substrates were given to patients in controlled trials.19

In a series of sequential studies at the University of Pennsylvania, 160 patients who were undergoing surgery for upper gastrointestinal malignancies were entered into prospective, randomized trials (see table, this page). 20,21 The randomization was to study the effects of standard enteral diet versus diets supplemented with arginine, omega-3 fatty acids, and ribonucleic acid (RNA). Those that received supplemented enteral feeding postoperatively had a decrease in infectious and wound complications and a decrease in hospital length of stay compared with the non-supplemented patients. In addition, lymphocyte proliferation diminished at day one after an operation, but returned to normal at day seven in the argin-

ine-supplemented group, whereas lymphocyte proliferation remained decreased in those that received the standard diet. Subsequently, a number of other randomized prospective trials were carried out.²²⁻²⁵ In several of the trials, there was a decrease in infectious and wound complications in supplemented versus control patients, although other trials revealed no clinical outcome benefit to supplemented feedings.

Gianotti and others randomized patients in a blinded placebo-controlled trial to either receive standard nutritional support or a diet supplemented with arginine, omega-3 fatty acids, and glutamine preoperatively and postoperatively. 26,27 The supplemented patients had a marked decrease in total complications related to infection compared with controls. These studies suggest that patients who are severely malnourished and who are to undergo elective major gastrointestinal (GI) operations should receive some form of enteral support prior to and subsequent to surgical procedures.

Institution of parenteral nutritional support in cancer patients, while adding fat and adding glycogen, does not necessarily increase lean body mass as it should. Thus, the use of hormones has been proposed to combine with nutritional support and improve metabolic and clinical outcome. Growth hormone is a single-chain polypeptide of 191 amino acids that appears to have dose-dependency as to its effects. It requires that nutritional support be provided, particularly carbohydrates, to meet metabolic needs in order to maximize effects. In

Postoperative enteral nutrition after GI surgery

					Infectious complications	
Author	Year	N	Exp.	Control	Exp.	Control
Daly, et al	1992	80	Ent*	Ent	11%	37%
Daly, et al	1995	60	Ent*	Ent	10	43
Kemen, et al	1997	154	Ent*	Ent	22	31
Giannotti, et al	1997	260	Ent*	Ent/TPN	15	23/28
Reynolds, et al	1997	67	Ent	TPN	27	47
Heslin, et al	1997	195	Ent*	IVF	17	19

^{*}Ent: arginine, omega-3 fatty acids + glutamine

1996, Thoreback and others noted a significant increase in lean body mass when growth hormone and TPN were used in patients after injury.²⁸ The immune effects included an improvement in delayed cutaneous hypersensitivity, a preservation of circulating immunoglobulins, a reduction in wound infections, a decrease in hospital length of stay, and a decrease in postoperative fatigue syndrome. In a subsequent study, growth hormone was used in 10 patients, seven of which were deemed to be normally nourished and three of which were less than 90 percent of their ideal body weight.29 In the former category, there was an increase in nitrogen balance using growth hormone plus TPN compared with controls; but in the malnourished cancer patient, there was no improvement in nitrogen balance.

One of the questions often asked about the use of nutrition in cancer patients relates to the effect on the tumor itself. Animal studies have shown that increased nutrition increases the growth of the tumor. When one utilizes specific nutrients such as glutamine, arginine, or others in animal studies, there are variable results.³⁰ In humans, it is much more difficult to discern the effects of nutrition on tumor growth because patients tend to have tumors that last a much longer period of time. Patients are treated with multiple other therapies in addition to nutritional support. In almost all clinical trials in cancer patients, there has not been a long-term survival difference in those that have received or have not received nutritional support.

In summary, surgical intervention often is required in malnourished cancer patients. Major operation and cancer both independently and together have metabolic and immunosuppressive effects. Parenteral nutrition as a technique is clearly safe. It does have positive biologic effects and it is required for many therapeutic complications that occur following major operation. Enteral nutrition is also safe and has beneficial biologic effects, which are similar to that of parenteral nutrition. It can be used both shortterm and long-term and is less costly. In terms of immunonutrition, there are clear-cut biologic effects, but there are disparate results in clinical outcome trials evaluating elective surgery patients; so, further studies will need to be done before we are certain as to their role in the elective surgery patient. Immunosuppressive cellular effects in the

malnourished cancer patient arise from a variety of causes. Even though a patient who undergoes major operation, has malnutrition, or suffers from cancer may have similar immune cellular effects, the causes are different. Cellular responses may be due to nutrient deficiencies, systemic neuroendocrine responses, and circulating immunosuppressive peptides produced either by the tumor or by the host in response to the tumor. Thus, the simple application of nutrition alone will not be sufficient to return all host defense mechanisms to normal. The paradigm in the past has been that if we fill the tank with nutrients and with calories, whatever is left over after fulfilling energy needs can be used for protein synthesis. The newer paradigm suggests that utilization of specific nutrients, utilization of the gastrointestinal tract, utilization of hormones or other substances may be required not only to improve metabolic effects but improve host defense mechanisms as well.

References

- Redmond HP, Hofmann K, Shou J, et al: Effects of laparotomy on systemic macrophage function. Surgery, 111:647-655, 1992.
- Windsor JA, Hill GL: Weight loss with physiological impairment: A basic indicator of surgical risk. *Ann Surg*, 207:290-296, 1988.
- Windsor JA, Hill GL: Risk factors for postoperative pneumonia: The importance of protein depletion. *Ann Surg*, 208:209-214, 1988.
 Good RA, Fernandes G: Nutrition, immunity, and
- Good RA, Fernandes G: Nutrition, immunity, and cancer—A review. Part I: Influence of protein or protein-calorie malnutrition and zinc deficiency on immunity. Clin Bull, 9:3-12, 1979.
- Redmond HP, Leon P, Daly JM, et al: Impaired macrophage function in severe protein-energy malnutrition. Arch Surg, 126:192-196, 1991.
- Fearon KC, Hansell DT, Preston T, et al: Influence of whole body protein turnover rate on resting energy expenditure in patients with cancer. *Ca Res*, 48:2590-2595, 1988.
- Norton JA, Stein TP, Brennan MF: Whole body protein synthesis and turnover in normal man and malnourished patients with and without known cancer. *Ann Surg*, 194:123-128, 1988.
- Cerosimo E, Pisters PW, Pesola G, et al: The effect of graded doses of insulin on peripheral glucose uptake and lactate release in cancer cachexia. Surgery, 109:459-467, 1991.
- Kern KA, Norton JA. Cancer cachexia. JPEN, 12:286-298, 1988.
- Rivadeneira D, Evoy D, Fahey III TJ, et al: Nutritional support of the cancer patient. CA, 48:69-80, 1998.

- 11. Dudrick SJ, Wilmore DW, Vars HM, et al: Long-term parenteral nutrition with growth, development, and positive nitrogen balance. Surgery, 64:134-142,
- 12. Copeland EM: Jonathan E. Rhoads lecture: Intravenous hyperalimentation and cancer: A historical perspective. *JPEN*, 10:337-342, 1986.
- 13. Serrou B, Cupissol D, Plagne R, et al: Parenteral intravenous nutrition as an adjunct to chemotherapy in small cell anaplastic lung carcinoma. Ca Treat Rep, 65 (Suppl 5):151, 1981.
- 14. Nixon DW, Moffitt S, Lawson DH, et al: Total parenteral nutrition as an adjunct to chemotherapy of metastatic colorectal cancer. Ca Treat Rep, 65 (Suppl 5):121, 1981.
- 15. Veterans Affairs Total Parenteral Nutrition Cooperative Study Group: Perioperative total parenteral nutrition in surgical patients. N Engl J Med, 325:525, 1991.
- 16. Brennan MF, Pisters PWT, Posner M, et al: A prospective randomized trial of total parenteral nutrition after major pancreatic resection for malignancy. Ann Surg, 220:436, 1994.
- 17. Billiar TR: Nitric oxide. Novel biology with clinical
- relevance. *Ann Surg*, 221:339, 1995. 18. Barbul A: Arginine: Biochemistry, physiology, and therapeutic implications. JPEN, 10:227, 1986.
- 19. Barbul A, Lazarou SA, Efron DT, et al: Arginine enhances wound healing and lymphocyte immune
- responses in humans. *Surgery*, 108:331, 1990. 20. Daly JM, Weintraub FN, Shou J, et al: Enteral nutrition during multimodality therapy in upper gastrointestinal cancer patients. Ann Surg, 221:327, 1995.
- 21. Daly JM, Reynolds J, Thom A, et al: Immune and metabolic effects of arginine in the surgical patient. Ann Surg, 208:512, 1988.
- 22. Braga M, Vignali A, Gianotti L, et al: Immune and nutritional effects of early enteral nutrition after major abdominal operations. Eur J Surg, 162:105-112, 1996.
- 23. Kemen M, Senkal M, Homann HH, et al: Early postoperative enteral nutrition with arginine-omega-3 fatty acids and ribonucleic acid-supplemented diet versus placebo in cancer patients: An immunologic evaluation of impact. Crit Care Med, 23:652-659,
- 24. Senkal M, Kemen M, Homann HH, et al: Modulation of postoperative immune response by enteral nutrition with a diet enriched with arginine, RNA, and omega-3 fatty acids in patients with upper gastrointestinal cancer. Eur J Surg, 161:115-122, 1995.
- 25. Heslin M, Lathony L, Leung D, Brooks A: A prospective randomized trial of early enteral feeding after resection of upper gastrointestinal malignancy. Ann Surg, 226:567-580, 1997.
- 26. Gianotti L, Braga M, Vignali A, et al: Effect of route of delivery and formulation of postoperative nutritional support in patients undergoing major operations for malignant neoplasms. Arch Surg, 132:1222-1229, 1997.

- 27. Braga M, Gianotti L, Cestari A, et al: Gut function and immune and inflammatory responses in patients perioperatively fed with supplemented en-teral formulas. *Arch Surg*, 131:1257-1265, 1996. 28. Vara-Thorbeck R, Ruiz-Requena E, Guerra-
- Fernandez J: Effects of human growth hormone on the catabolic state after trauma. Hormone Res, 45:45-55, 1996.
- 29. Tayek J and Brasel J: Failure of anabolism in malnourished cancer patients receiving GH. J Clin Endo & Nut, 80:2082-2087, 1995.
- 30. Reynolds JV, Daly JM, Shou J, et al: Immunologic effects of arginine supplementation in tumor-bearing and non-tumor-bearing hosts. Ann Surg, 211:202, 1990.

This article is excerpted from Dr. Daly's 1999 Commission on Cancer Oncology Lecture, "In Defense of the Surgical Patient," which was presented in San Francisco, CA.

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"Laying on of the hands"



by Josef E. Fischer, MD, FACS, Cincinnati, OH



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A nyone who hasn't been asleep for 25 years, Rip Van Winkle-like, knows that medicine has an image problem. Physicians often are seen as arrogant, uncaring, out of touch, too wealthy, and uninterested in the welfare of their patients. To the majority of physicians who are genuinely interested in the well-being of their patients, and to whom they seek to provide excellent care, this perception is deeply troubling. Yet, despite the efforts of individual practitioners to provide the best care under increasingly difficult circumstances, most Americans believe that organized medicine is not interested in the patient.

Furthermore, surgical leaders sometimes perpetuate our negative image. For example, I recently attended a meeting in which a discussion of electronics and the practice of medicine transpired. In that session, an officer of a major medical organization suggested that physicians communicate with their patients by e-mail to enhance physician-patient interaction.

While I have the highest regard for that physician's intellect and leadership qualities, I believe that in this case, he has gotten it all wrong—wrong by encouraging a personal detachment and disembodiment from patients. This proposal, in my view, is the ultimate evolution of the so-called medical leadership's views of the academic medical center, which has gotten us into the trouble we in medicine have been in over the past few years. This attitude, I believe, has led us astray.

The various organizations representing the leadership of academic medical centers, teaching hospitals, and colleges of medicine have developed a stance in which research is now touted as the beall and end-all, manifest by the tyranny of where that institution is on the list of federal grant holdings. Contact with patients is de-emphasized, patient care is de-emphasized, and service to patients is not a priority. Taken to its logical extreme, email communication with patients, those few that the academic medical center would retain under such circumstances, would represent the ultimate disconnection from patients—a disembodied contact in which the physician would never have to see the patient. Thus, research would triumph, as e-mail messages could be done after hours or at times that are less convenient for research. As you may have gathered, this prospect sorely troubles me. It emphasizes and confirms to me that the leaders of academic medicine in this country really do not understand that medicine has been thoroughly degraded over the past 10 to 15 years, that the profession is no longer considered capable of regulating itself, and that the public has turned its back on us.

Yet this degradation and the public's scorn does not extend to all aspects of care. Alternative medicine, herbatology, homeopathy, massage therapy, aromatherapy, indeed even chiropractic care, are flourishing, and the public is willing to go outside of the insurance system and pay "first dollar in" (charges, not discounted) to these individuals. Indeed, a number of physicians have turned their backs on the insurance system and accepted patients on a cash-only basis. For those who can give the time to patients, they indeed are flourishing as well. Has it ever occurred to the leadership of the American academic medical community to ask why, in the face of the destruction that reimbursement reductions have wreaked on the academic medical center, these previously controversial forms of medicine are flourishing and patients are willing to pay the agreed-upon fees to their practitioners? Is it possible this trend merely reflects that what the public really wants, and what physicians have traditionally offered, is "laying on of the hands," a practice not encouraged by our medical schools?

The lack of "laying on of the hands" is unfortunately widespread. Contrast, for example, the great painting "The Doctor" by Sir Luke Fildes, which shows a physician at bedside during the Philadelphia yellow-fever epidemic (see opposite page). The physician, shown in a caring mode, could obviously do very little for his young patient, who may very well have died. However, he was there, and he "laid on the hands." Contrast this with the current procedures in approximately 50 percent of family practice clinics, the mode of practice currently championed by most deans of academic medical centers in which the physician is never seen, and a nurse practitioner or a physician's assistant is the only one who sees the patient. While the care may be equivalent, and there is evidence that it is, is this why we went to medical school? Is this laying on of the hands? What have we come to?

It is constructive to harken back to 1913 when, in the formation of the American College of Surgeons, Franklin Martin had as two of his basic tenets that "ghost surgery" and fee-splitting were

eschewed by the College. Was this not a manifestation of the face-to-face relationship with the patient, in which laying on of the hands was not only proposed but championed?

The unfortunate trend toward disembodying health care has been long in coming. One of the vice-chairs of our excellent faculty, Henry Neale, MD, FACS, chief of the division of plastic surgery and former chair of the American Board of Plastic Surgery, recently brought to my attention a speech by William A. Altemeier, MD, FACS, his former chief, my predecessor, and a Past-President of the American College of Surgeons, warning against the conversion of the practice of medicine to a business.² What is interesting is that this presidential address to the Society for Surgery of the Alimentary Tract was published in 1974.

Despite the fact that we are looking at the results of a problem that has been building for several decades, there is an opportunity here. Lest you believe that I have taken leave of my senses, let me outline it.

The death of managed care

I believe "Phase I" managed care is dead. While some of my faculty think this theory is delusional, it is not my original observation but that of highly respected individuals in industry whose refusal to pay for the rapidly increasing costs of health care actually triggered the managed care revolution. Contrary to their own gut-wrenching applications of quality in the 1980s and 1990s, which were winwin with "everyone" profiting (except for the millions who were found redundant and lost their jobs), they point out that managed care creates a win-lose situation, with redistribution of income from physicians to executives, and from bedside to overhead and profit, as well as huge bonuses paid to executives.³

This scenario is not what industry envisioned when it promoted managed care. Now, not only is the public angry, but the sponsors of Phase I managed care are surrounded by irate employees who decry the lack of availability, the insufficient time physicians spend with them as they are forced to make up their quotas of seeing patients. Additionally, there is the lack of capital for newer advances in patient care on the part of both hospitals and physician practices and the outrageous bonuses awarded to executives whose incentives seem to be

decreasing access and denying services (rationing —the "R" word).

Is health care a privilege or a right?

It is interesting that in the previously cited *New York Times* article, ¹ Uwe Reinhardt, PhD, the entertaining and widely quoted Princeton University economist, points out that with the Internet revolution, physicians will be punished for lack of quality, and therefore, physicians are trying to turn back the clock, an effort he says will not work. Ethicists, whatever their credentials, seem to agree with Professor Reinhardt's pronouncements. I, however, believe Professor Reinhardt is probably wrong, as wrong as he was about managed care being the answer to this country's health care problems. Indeed, I think he misses the point.

In the 1960s, after prolonged debate, it was decided that health care was not a privilege, but a right. At that point, with the growth of the welfare society promoted very effectively by President Lyndon Johnson, Medicare and Medicaid were instituted, providing a safety net for the elderly and the indigent, two groups of traditionally underserved patients. While not all underserved patients were covered by these initiatives, the majority were. The focus was on quality health care for all—perhaps not the amenities, such as private rooms, but supervision and access to first-rate care. Most in the medical profession agreed with this initiative. Others warned that accepting the federal dollars would ultimately lead to government regulation. Indeed, this argument proved prophetic.

Between the 1960s and the present, the skyrocketing costs of health care, well in excess of inflation, led industry to join with the Left to mandate managed care. The business community and the country decided it simply did not want to pay for the increasing costs of health care. Thus, the Right joined with the Left to begin the systematic degradation of the medical profession. Simply speaking, medicine, under the guide of the New Age economists such as Professor Reinhardt, became a commodity to be traded by business, the unions, and the government.

Quietly, as the 1980s evolved, the perception grew that quality health care was no longer available to everyone, nor, indeed, was it available even to those people who thought they were paying for it. Thus, quality medicine, the mantra of the 1960s, was no longer viewed as extant, and because people believed quality medicine was no longer available, the country almost without debate abandoned the concept of health care as a right and not a privilege.

I am rather surprised at Professor Reinhardt, because he is the individual most closely identified with the concept of three class tiers in the U.S. economy and society. While a simplistic concept and one that does not cover all individuals, it has some merit, if only for discussion purposes. According to this paradigm, the upper class, the top 1 to 5 percent, live in gated communities, purchase their own security, pay for their own garbage collection, send their children to private elementary and high schools and then to Ivy League colleges. In health care, this segment purchases whatever they want. The middle class live in the suburbs and exurbs with sympathetic police forces, public garbage collection, and fire protection. Their children go to good to excellent public schools and attend, for the most part, private or state universities. Their health care is restricted, with managed care unhappily providing the major share. The urban poor, the permanent underclass, now approaching fourth-generation dependency, experience a total breakdown of family, attend unresponsive public schools in the grip of teachers' unions that stoutly resist any attempt to measure quality, rarely graduate from high school, face a hostile police force and indifferent garbage collection, and for medical care, take what's left over. I fail to understand the inconsistency in Professor Reinhardt's thinking, since the current state of medical care is perfectly consistent with the three communities he envisions for the United States.

In any event, the utopian concept of quality health care for all has disappeared as an unforeseen side-effect of the attempt at economies in health care and without the noble vision of quality health care for all—health care as a right, not a privilege.

The opportunity

The business community recognizes that Phase I managed care is a failure. Indeed, so do the legislatures. In at least 23 states, some type of patients' rights bill has not only been proposed but passed.

In July 1999, for instance, Ohio passed a patients' rights law that includes an external review system, and, undoubtedly, before long will include some ability to sue managed care companies. Congress is now debating national patients' rights legislation, and it is likely that at least some limited ability to sue managed care companies will result despite the extraordinary lobbying efforts by the insurance companies and their associations. Legislatures follow, they do not lead, and they clearly want to improve a health care system increasingly viewed as having gone awry. Thus, this intense interest in improving quality health care, however misplaced, utilizing the tort and malpractice system, seems inevitable.

The opportunity awaiting us is fairly simple and straightforward. Business understands that unless it can duplicate the win-win situation that it pioneered with its quality movement in the 1980s and 1990s, health care will not improve, and businesses will not experience an adequate return on what they are paying. Our traditional answer to the plea by business for someone to partner with them in trying to identify "quality" has been the traditional guild response: "We do not know how to measure quality; we do not think we can; and we will not join with you in an attempt to identify it." Industry asks us questions, such as why the rate of hysterectomy in one U.S. county is 400 percent that of an adjacent county. Our response—that this is the art of medicine, and it cannot be fathomed, as if this is some Delphic oracle mystery—does not strike a responsive chord.

I believe it is time organized medicine, the College first and foremost, take the lead in trying to identify best practices and to partner with business in an attempt to identify quality and base medical practices on our concept of quality. Quality means output over cost. Hopefully, we can partner with business in an attempt to achieve the same or improved output or patient care at a lower cost by resorting to best practices. Having done this a number of times in our own institution by applying best practices by consensus, it is clear that this can be done with some work on the part of medicine, nursing, and hospital administration with substantial savings. 4,5 We also need to partner with business in attempting to move them from focusing on the single episode to the longterm costs of health care. Since half of the costs of health care are estimated to occur in the last six months of life, for example, in malignant disease, wouldn't it be possible to get business to focus on best practices for diseases such as carcinoma of the colon, and estimate lifetime costs and the true savings of best practices? I believe that industry would jump at the chance if they conceive that they had someone responsible with whom to partner.

This is the time to open dialogue with business. We need to tell them we are not certain we can measure quality, but we will attempt to help them identify it, however long and convoluted this attempt may prove. We must demonstrate that we will partner with them in promoting best practices, and when we do not know what best practices are, conduct clinical trials and patient-oriented research in an effort to identify them. I am hopeful that business will join with us and even pay for such research if they correctly perceive that this may save them money in the long run. If we can get them focused not on the single episode, which is inimical to most physicians, but on their expenditures on long-term outcomes, and to identify quality as output over cost, everyone will win. Indeed, with their concept of win-win situations, ultimately we will probably be paid more because they feel that this is an essential component of joining with medicine to improve quality.

In addition, if we do this, we can return to our historical role as advocates for the patient. This is one of the principles upon which the College was founded, and remains one of the principles that all surgeons, who in the best sense are physicians who operate, have championed.

To some, these proposals may seem Pollyannaish. Even so, I personally find the prospect of returning to our established values very exciting and look forward to the day of partnering with industry so physicians can do what they have always done best—advocate for their patients, "lay on the hands," and lend advice and comfort. I look forward to medicine being restored to a profession of which we can be proud and to which we can attract our sons and daughters, advocating our profession to them. That prospect I find particularly exciting.

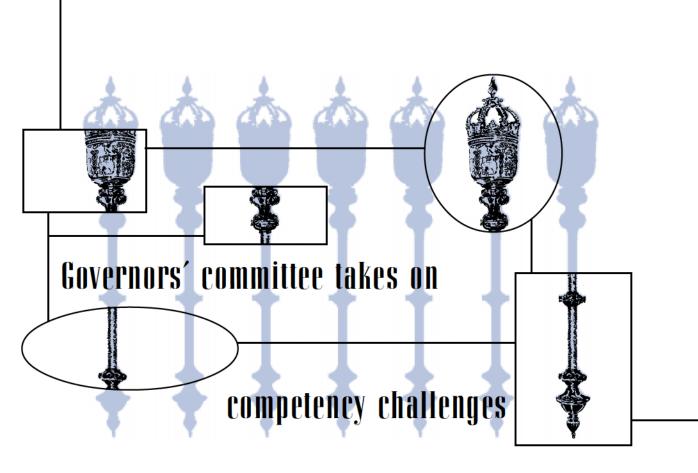
- medicine returns. NY Times, Friday, March 17, 2000, page A1.
- Altemeier WA: Have we lost our way? Am J Surg 129:3-9, 1975.
- Galvin RS: What do employees mean by "value?" *Int Hlth C Rep*, September-October, 1998, pp. 1-15.
- Archer SB, Burnett RJ, Flesch LV, et al: Implementation of a clinical pathway decreases length of stay and hospital charges for patients undergoing total colectomy and ileal pouch/anal anastomosis. Surgery, 122:699-705, 1997.
- Pritts TA, Nussbaum MS, Flesch LV, et al: Implementation of a clinical pathway decreases length of stay and cost for bowel resection. *Ann Surg* 230:728-733, 1999.

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References

1. Kolata G: For those who can afford it, old-style



by John M. Daly, FACS, New York, NY

Editor's note: In the October 2000 Bulletin, Barbara L. Bass, MD, FACS, Chair of the College's Board of Governors (B/G), announced that a series of articles by the individual B/G committee chairs would appear in this publication. The articles are intended to "highlight the work of the Governors committees...with the hope that interested Fellows will seek out committee chairs to provide their perspectives on issues."

This article, which focuses on the recently renamed and redirected Committee on Physician Competence and Liability, is the first of that series of articles. The second report will be from the Committee on Socioeconomic Issues, chaired by Andrew Warshaw, MD, FACS.

The Board of Governors' Committee on Professional Liability was renamed the Committee on Physician Competency and Liability in October 1999. This move expanded the committee's scope beyond questions pertaining to medical malpractice to include those relating to the assessment of surgical competence. It was a necessary, relevant, and timely change in direc-

tion, coming almost immediately prior to release of the report from the Institute of Medicine regarding medical errors, *To Err Is Human: Building a Safer Health System*. That report raised public concern about whether hospital patients were receiving safe and effective treatment.

To help clarify the redirected committee's functions, this article provides some background on the committee and its role within the College. It also demonstrates how the committee is working to achieve its new and existing goals.

Background

The B/G Committee on Professional Liability was established in the 1970s. Since its inception and to this day, the committee has been composed of Governors who are keenly aware of the liability issues within their respective regions, drawn from the spectrum of surgical specialties.

The committee's original purpose was to respond to surgeons' concerns about increasing malpractice litigation and rising costs. The committee largely acted as a funnel of information on state liability legislation, court rulings, and

related issues, disseminating that information to the Regents at their quarterly meetings and to the Fellows through their Governors. Similarly, the Regents formed a Professional Liability Committee, which focused more of its efforts on following and influencing malpractice reform at the national level.

As the health care environment has changed over the last few decades and quality concerns have captured greater national attention, it has become more and more apparent that the College needs to use the resources available through its committees to deal with a broader set of issues. As a result, several of the Governors' and the Regental committees—including the two traditionally focused on medical professional liability—have taken on new assignments and, essentially, new identities.

The redesigned B/G Committee on Physician Competency and Liability now not only fulfills its standard functions, but is additionally responsible for developing a program to aid in educating Fellows about the process, definition, and need for physician and health system competence, as well as considering methods to test proficiency once the concept is clarified. At this juncture, the committee has a two-pronged purpose: to encourage passage of medical malpractice reforms at the state and federal levels, and to help the College fulfill its mission of ensuring that patients receive excellent care from surgeons who demonstrate the highest level of competence.

Meanwhile, the Regents' Professional Liability Committee was recently renamed the Patient Safety and Professional Liability Committee and given a new directive to expand its ongoing efforts to enhance patient safety. It has since generated excellent articles on patient safety and error reduction for publication in the *Bulletin*, including the recent article by Paul F. Nora, MD, FACS, "Improving safety for surgical patients: Suggested strategies" (Sept. 2000, p. 11-19). Led by Barry Manuel, MD, FACS, that group also has begun revising the College's *Patient Safety Manual*.

Competence concerns

Surgeons always have sought ways to reduce medical errors and complications resulting from surgery. However, the public is now demanding more information about the risks associated with procedures, the quality of care at individual facilities, and their surgeons' level of skill. Therefore, it is imperative that surgeons and, indeed, all physicians work to attain a demonstrably superior level of competency.

The dedicated members of the B/G Committee on Physician Competency and Liability have developed a multidimensional, long-term approach to help assess and verify Fellows' competency. At this point, our efforts center mainly on gathering information and educating surgeons about medical errors, how they can be reduced, and how competency can be improved.

As part of its educational efforts, the committee hosted a session for Governors during the Clinical Congress titled, "Error Reduction and Testing Physician Competency: Why, What, and How?" The purpose of that session was to help the Governors better understand the issues surrounding competency and how they are perceived at different levels of the health care system's infrastructure. We anticipate that Governors will be able to share this information with surgeons in their home states. The speakers for the program and their topics were as follows:

- Janet M. Corrigan, PhD, director, division of health care services, Institute of Medicine, spoke on "The Urgent Need to Improve Patient Safety."
- David L. Nahrwold, MD, FACS, chair, American Board of Medical Specialties (ABMS) Task Force on Competence; chair, strategic initiatives committee, American Council on Graduate Medical Education; and professor emeritus of surgery, Northwestern University Medical Center, Chicago, IL, provided a "Report from the ABMS Task Force on Competence."
- Wallace P. Ritchie, Jr., MD, FACS, executive director, American Board of Surgery (ABS), and professor of surgery, Temple University School of Medicine, Philadelphia, PA, discussed an "Assessment of Physician Competence by the ABS: Current Plans, Future Initiatives."
- William C. Nugent, MD, FACS, section chief, cardiothoracic surgery and professor of surgery, Dartmouth-Hitchcock Medical Center, Lebanon, NH, spoke on the "Northern New England Cardiovascular Disease Study Group:

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A Regional Effort to Reduce Risk in Patients Undergoing Heart Surgery."

Attendance at the session exceeded expectations, with between 100 and 150 Governors attending. The members of the committee agreed that the session provided insight into why competency is an important issue, becoming a focal point for the government and most major medical institutions. The session encouraged the Governors to return to their constituencies ready to seek new ways to improve surgical proficiency within their geographic areas. The Governors who attended the program have indicated particular interest in studying questions of recertification and how systems-based approaches can be applied, for example, in the operating

room and the intensive care unit.

As a next step toward helping surgeons attain a higher level of competence, the committee plans to work with the College's leadership to explore the possibility of obtaining a grant from the federal Agency for Healthcare Research and Quality (AHRQ). In November, AHRQ announced that it is funding six new research projects designed to improve patient safety by identifying and preventing avoidable system errors. Funding for the fiscal year (FY) 2000 projects totals \$2 million. The agency expects to award a larger amount for patient safety research in FY 2001 and is in the process of releasing a series of "Requests for Applications." The American College of Surgeons, perhaps

through its clinical trials group, could apply for financing to study aspects of error reduction and prognostic predictive criteria and actively participate in this project. This action would be an extraordinary opportunity for the College to take a commanding position in studying surgical errors, to work with the federal government to overcome any shortcomings, and to make certain that patients are receiving accurate data about surgical mistakes.

In addition, the committee is working with other groups that are examining the issue of competence, including the ABS and the ABMS, to ensure that they receive input on the topic from as many Fellows as possible. Finally, we look forward to heavy involvement in the development of a College-based center for competency, giving it focus and working with the American College of Surgeons Oncology Group (ACOSOG) to arrive at best practices.

Continued emphasis on liability

Although we have taken on new challenges related to questions of surgical competency, the B/G Committee on Physician Competency and Liability continues to dedicate itself to solving the problems associated with professional liability. While we recognize that little positive has happened in the area of tort reform, particularly at the federal level, the committee members strongly believe we should continue to work toward accomplishing this goal.

Because achieving passage of significant tort reforms, such as a cap on noneconomic damage awards, has proven such a formidable task, surgeons and, hence, our committee members have begun seeking novel solutions to the professional liability situation. In particular, there is a new focus on seeking passage of legislation that would establish medical review panels. These panels are in place in many regions and are resulting in speedier litigation, a reduction in the number of frivolous lawsuits, and more equitable payments. Many Governors have been active in advocating for the establishment of these mediating panels within their states and regions. They also have been working to develop criteria for these panels to use in formulating decisions about the appropriateness of the care patients receive.

The Governors plan to continue to have focused efforts at the state level in dealing with questions of medical professional liability. The committee, however, also believes it is important that Governors work to achieve changes in the malpractice system at the federal level. We, therefore, are encouraging Governors to participate in their respective chapters' Capitol Hill visits arranged through the College's Washington Office and to raise liability reform issues during their conversations with their legislators and congressional staff.

Other issues of concern to the committee include the development of federal regulations guiding the exchange of patient medical record information and requiring physicians to develop compliance plans. We also are monitoring the health plan liability provisions within the Patients' Bill of Rights legislation under consideration in Congress. Further, the committee members are very concerned about the potential disclosure of the incomplete information contained in the National Practitioner Data Bank. While it appears that the public will not have access to this information any time soon, individual states are providing similar information to their citizens. Massachusetts, New York, and Connecticut, for instance, have legislated complete public access to information about malpractice actions and settlements against physicians who practice within their confines. Further, physician "report cards" describing patient outcomes and tort activities may be developed in other states, as well.

continued on page 38

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Socioeconomic tips of the month

Adding new associates to practices

t the recent Clinical Congress in Chicago, Fellows, Initiates, Candidates, and others had an opportunity to get one-on-one practice management tips through a consulting service sponsored by the Health Policy and Advocacy Department. The requests for information had a dominant theme—transition in practices. Tom Loughrey, CEO of Economedix and a practice management consultant for the College, has the following suggestions for surgeons considering adding a new associate to their practices.

Q.

How do we find a new associate?

First of all, the time to start is right now. Surgeons finishing training programs in mid-summer are looking at opportunities now and want to have a good idea where they will be by the spring. Since time is short, the fastest way to reach qualified surgeons is directly through the training programs.

Obtain a list of the residency programs and their directors and chief residents. The programs geographically closest should receive your attention first. The most complete list of residency programs is available from the Accreditation Council for Graduate Medical Education (ACGME). They can be reached at *www.acgme.org* or by phone at 312/464-4920. They have complete listings of program directors and coordinators, along with their addresses and phone numbers.

A letter or an e-mail should be sent to the residency programs of interest briefly summarizing the opportunity, including the location, the surgical specialty, the size of the practice, and whether the position leads to a partner/shareholder position. Ask that the information be shared with qualified residents and provide a contact name and phone number or e-mail address.

Another good option is to use the College's Career Opportunities Position and Resume Data Bank established by the College's Candidate and Associate Society. It can be reached through the ACS Web site at www.facs.org/jobs/toc.htm and

allows you to review resumes and directly contact candidates.

Q.

What do new associates want?

Of course, wants vary from one individual to another, but, generally speaking, surgeons coming out of a training program need security and opportunity. The security need is best met with an agreement that provides a base salary and benefits. The opportunity need is best met by having an agreement that offers an equity position in the practice at some future point in time.

There are trade-offs between security and opportunity. For example, a young physician with a stronger need for opportunity might opt for a lower salary guarantee if it is possible to attain a better income based on productivity or to become a partner sooner and under better terms. Conversely, someone with a higher security need may be satisfied with a better salary but less opportunity to participate in a productivity bonus arrangement.

Salary guarantees at some level are expected for just about any new associate. Expected pay levels will vary by surgical subspecialty, and other elements of the offer may include signing bonuses, moving expenses, bonus opportunities, and so forth. Generally, the most productive salary arrangement is based on a guarantee against production. The idea is that the new associate will have an increasing level of productivity over the first year and resulting practice income will exceed the cost of both the associate and related overhead. For example, a new associate may be guaranteed a salary of \$120,000 per year but actual compensation is based on 30 percent of productivity (measured by dollars collected). The breakeven point is \$400,000 in collections. Under this arrangement, the new associate would receive \$120,000 in the first year even if he or she brought in less than \$400,000 for the practice. If production exceeds \$400,000, the new associate would receive 30 percent of the excess.

Q.

Are there other common income-sharing formulas?

One of the most common income-sharing formulas is to have an income base and a bonus payable for any productivity above a predefined goal. A new associate may have a base salary of \$100,000 with a bonus available for any production over \$250,000. The level of bonus will reflect the practice's overhead. A practice with 50 percent overhead may consider a bonus up to 50 percent of the excess production. In reality, though, the bonus percent will be something less than 100 percent of the profits. If this amount were being given there would never be a financial incentive to become a partner or shareholder in the practice. Typically, bonuses will be somewhere between 10 percent and 40 percent of the productivity over the goal. The actual amount will depend on the salary base and benefits.

Q.

What benefits usually are expected?

At minimum, the new associate will expect the same health coverage the other physicians receive. In addition he or she will expect two to three weeks vacation with time to prepare for board certification, if appropriate. An allowance for moving expenses may be given and in some cases will be structured as a loan, which will be forgiven after one year. This protects the practice (to the extent the loan is ever collectible) in the event the associate leaves before one year. Under certain circumstances, practices have provided signing bonuses. This is not the norm, though, and usually is offered only in unusual situations, such as geographic location, loss of other income, or special skills that the practice has a strategic need to fill.



What about "noncompete covenants?"



It is reasonable both for the practice to protect a marketplace that has taken a lot of hard work to develop and for an associate

to have some reasonable ability to remain in practice if a separation is beyond his or her control. One way to ensure such parity is to have a "noncompete covenant." Under this arrangement, the associate agrees not to go to a competing practice within a reasonable geographic area if he or she voluntarily withdraws from the practice. In the event the practice terminates the associate for reasons beyond his or her control, the noncompete covenant does not apply. Thus, both parties must arrive at an agreement that will work, and stick to it.

There is, however, much discussion over whether noncompete covenants are ever enforceable. The only way to really find out is to try and enforce them. In any event these covenants can be expensive to enforce even if one party prevails over the other. The key is whether the covenant is reasonable. This is a judgment call, but most arbitrators do not like enforcing provisions that limit competition and commerce.

Q.

When should an associate become a partner or shareholder?

First, it is entirely possible that a new associate never will become a partner. Partnership is reserved for those individuals who want to take responsibility for the development of the practice and its business operations. This work is usually nonclinical and carries no extra remuneration. For some associates, never attaining partnership will be perfectly fine. They expect good working conditions, a good income, challenging clinical work, and a progressive environment. They may not want anything to do with running a practice.

More often, though, a new associate will want an equity position in the future. They also expect it to match the position of the other partners. Typically, partnership occurs within two to four years from the time the associate joins the practice. The time may vary based on the guarantee the employee receives and the cost of buying into the assets.

The buy-in will usually be based on purchasing an equal share of the collectible accounts receivable plus an equal share of tangible assets of the practice less any outstanding debt. In addition, it may be reasonable to expect a payment for the intangible assets, or "goodwill" of a practice. The amounts for all of these items can be difficult to determine. It is appropriate to lay out from the beginning of the association when the associate will become eligible for partnership and what they will be expected to buy into. If the exact value cannot be determined at that time (which it usually cannot), then the methodology for determining it should be agreed upon.



Do we need to have a contract?

The quick answer is, "yes." The purpose is to make certain there are no surprises later. Without a contract, the only record is the memory of the parties involved, and even among honest, well-intentioned people memories and intentions can differ. A good contract lays out facts and intentions that are mutually agreed upon and that can be reviewed later by both parties as well as independent arbitrators in the event of a disagreement.

There is only one time to negotiate a contract and that is up front. Contracts are normally prepared by the practice as an offer. It is very reasonable to expect the offer to be negotiated, and neither party should be put off by the other wanting to add or eliminate conditions. If there are disagreements, this is the best time to get them out in the open. Honest negotiation working toward a win-win outcome is a mark of professional maturity. A potential associate who has many questions, concerns, requests, or even demands may appear to be someone who is not a team player. In the end, if the haggling produces a good agreement, that will be all that matters.



What issues face a solo surgeon who is bringing in a new associate?

There are several. One deals with family members, such as a spouse, working in the practice. At some point, if the associate will become a partner, it is reasonable to expect that family members will step aside. This

can be very difficult and may even have a negative impact on the practice if the person cannot be adequately replaced. This is usually shortlived, though, and the increased harmony that is produced may be worth the short-term disruption.

Second, the practice will need to be keeping a clean set of books. Closely held businesses often have a mix of business and personal expenses intertwined. In the solo practice this may not be harmful, but for a group, even a group of two, it will be unacceptable. It will be expected that business expenses be clearly identified and separated from personal expenses. The partners may even have employment agreements or expense-sharing agreements between them that define exactly how various expenses will be treated.

Third, work habits can become an issue. One physician may be very self-reliant and compulsive about time. Another may be very dependent on staff and much less concerned about time and punctuality. These personality differences need to be determined from the outset, and, if they are profound, agreements need to be in place that minimize the impact on each person. In the event this cannot be done, it may be better that this alliance never occurs. A good employment agreement, honest and candid conversation, and a strong, well-trained staff will help minimize these differences.

In addition, an immediate change may be purely economic. Most new associates' practices will develop from business that is handed to them by the current partners. This is business that established partners give up to get someone started. Ideally, the solo surgeon has been overburdened and has been looking for some relief. In other situations this may not be the case, and the established surgeon may be taking a difficult pay cut. If the pay reduction is unanticipated, it could lead to unpleasant clashes and feelings between the surgeons. Such problems can be minimized, avoided, or at least anticipated by carefully evaluating the demand for services from patients and referring practices before a search for an associate is even ini-

Sometimes the additional business simply is continued on page 45

College news

Spring Meeting to be held in Toronto

The College's 29th annual Spring Meeting will take place April 22–25, 2001, at the Westin Harbour Castle in Toronto,ON. To emphasize its strong commitment to and support of general surgery, the American College of Surgeons devotes its annual Spring Meeting to the interests and needs of the practicing general surgeon.

The Advisory Council for General Surgery has planned a program for the 2001 Spring Meeting that will be of interest to all general surgeons. Included in the program will be a number of postgraduate courses in image-guided breast biopsy, including: Breast Ultrasound and Stereotactic Breast Biopsy; Ultrasound for Surgeons; Ultrasound in the Acute Setting: Abdominal Ultrasound: Transabdominal, Intraoperative, and Laparoscopic; and Surgical Education: Principles and Practice. These courses will provide didactic and workshop experience in these techniques, which have become useful and necessary tools for the modern general surgeon.

In response to continuing calls for verifying surgical competence, the Assembly for General Surgeons on Sunday, April 22, will address Continued Professional Development: Maintenance of Certification. The session will focus on new initiatives of the certifying boards in the U.S. and Canada to replace recertification mechanisms with programs to measure and to maintain professional competence. This in-



The Toronto skyline.

teractive general session encourages discussion by all in attendance, so that the views of practicing general surgeons on the important issue of physician accountability to patients, institutions, payors, and regulators can be shared.

Panels on endovascular surgery, misadventures in laparoscopic surgery, inflammatory bowel disease, neoadjuvant therapy for cancer, appendicitis, and new directions in cancer care will be complemented by popular didactic courses in minimal access surgery, vascular surgery, and trauma. The Film Program featuring highlights of the 2000 Clinical Congress will round out an exciting spring program.

To enhance the educational

value of this meeting, technical exhibits will again be presented. More than 50 companies will present products or services that relate to the practice of surgery.

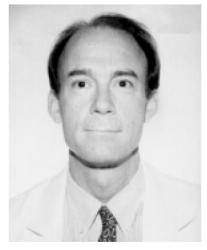
The preliminary program will be published in the February 2001 issue of the *Bulletin*. Also look for information on our Web site at www.facs.org beginning in February. Fellows of the College will be receiving the 2001 Spring Meeting program planner and registration form in February, so watch for it in your mail. Advance registration for the meeting is free for all Fellows, Associate Fellows, and Candidates. It will be possible to register online in February through the College's Web site.

Report from a Travelling Fellow

by Stanley W. Ashley, MD, FACS, Boston, MA

I arrived in Wellington, the capital of New Zealand, on the evening of May 2, 2000. Wellington is a beautiful bay city with an exciting airport runway nestled between two coastal mountains. I spent the evening with Professor A. W. Beasley, an orthopaedic surgeon whom I met at the ACS Clinical Congress in San Francisco, CA. He was extremely helpful in planning my travels. Dr. Beasley has retired from practice and currently is pursuing his interest in surgical history. He was recently asked to write a history of the Royal Australasian College of Surgeons (RACS), their equivalent of the American College of Surgeons. Dr. Beasley is also the immediate past-president of the Wellington Club, a business and social club where he served as my host for dinner and provided a superb introduction to New Zealand history, culture, and

I next visited the University of Auckland, where I was hosted by Dr. John Windsor, an upper gastrointestinal and hepatobiliary surgeon. The department of surgery at Auckland, chaired by Professor Graham Hill, is one of three centers in New Zealand offering advanced training in surgery. As in Australia, surgical training in New Zealand typically consists of a one-year rotating internship, followed by at least two general years of clinical surgery, then two to three years of advanced training, of-



Dr. Ashley

ten combined with a year or two abroad.

Auckland has a strong clinical program complemented by active basic research, including laboratories devoted to surgical nutrition and pancreatitis. I spent the day meeting with faculty, hearing about some intiguing studies on acute pancreatitis emanating from Professor Windsor's laboratory, and participating in a symposium on chronic pancreatitis. I also had the opportunity to see some of Auckland, including a visit to a display of artifacts from the Maori, the original Polynesian settlers who now constitute about 10 percent of the population.

My next stop was South Island, where the Southern alps and Norwegian-type fjords provide some of the most spectacular scenery in the world. I visited the department of surgery at Christchurch Hospital on the east coast, where my host was Dr. Frank Frizelle, a colorectal surgeon.

Like the other academic centers in New Zealand, Christchurch Hospital is a public hospital where the university surgeons spend the majority of their salaried time, although most surgeons also supplement their salary with a day per week of private practice at one of the smaller local institutions. There are also surgeons in New Zealand with exclusively private practices. The system is similar in Australia, although it was my impression that more of the academic surgeons in Australia spend a greater percentage of their time in private practice and, at least in some cities, the private patients are cared for at the same hospitals as public patients.

In both countries, the public health system seemed to function well. Although the waits for elective procedures are long, the care is superb and coverage basically universal. At Christchurch, I had a pleasant visit making rounds on the colorectal service, observing in the operating theatre, and participating in an evening symposium on short bowel syndrome.

I then travelled to Melbourne, Australia, for the RACS meeting. Unlike the American College of Surgeons, their college, which has 4,700 members, oversees surgical training in Australia and New Zealand, including most of the functions of our Residency Review Committee and American Board of Surgery. Fellowship in the RACS is equivalent to board certification in the U.S.

Like our Clinical Congress, in addition to plenary sessions, their annual meeting offers an incredible diversity of presentations at parallel sessions that are sponsored by the various surgical divisions and sections representing areas of subspecialization. These areas include breast, cardiothoracic, colon and rectal, endocrine, general surgery, head and neck, hepatobiliary and upper gastrointestinal, military, neurosurgery, orthopaedics, pediatric, plastic and reconstructive, rural surgery, surgical history, trauma, transplant, and vascular. It was my impression that, at least at the academic centers, general surgeons are even more specialized than their counterparts in the U.S.

Each of the divisions and sections sponsored sessions featuring an invited guest, often from overseas. Highlights of the meeting for me included the opportunity to attend the Cowlishaw Symposium, a one-day event devoted to surgical history, and invitations to present at three different scientific sessions. The RACS also invited me to a variety of social functions, including a reception at the Melbourne Cricket Ground. I had a pleasant evening with Dr. Stuart Renwick, then president of the Australian and New Zealand Chapter of the American College of Surgeons.

After some sightseeing in Melbourne, I rented a car and drove over three days to Sydney. The countryside was spectacular, including towering mountains, tropical rainforests, and a series of beautiful coastal towns. Sydney was preparing for the 2000 Summer Olympics, and I visited the new Olympic Stadium and enjoyed a ferry ride around Sydney harbor.

I was a guest at Royal Prince Alfred Hospital, where Dr. Michael Soloman—a colorectal surgeon and director of surgical research—served as my host. The hospital is a beautiful Victorian building on the University of Sydney campus. I toured the facility, spoke at their departmental grand rounds, and had the opportunity to participate in a din-

ner journal club that evening.

Flying on to Brisbane, I was hosted by Dr. Russell Stitz and visited Royal Brisbane Hospital. Dr. Stitz and his colleagues have developed a very strong program in minimally invasive surgery, and I was impressed while observing both a low anterior resection performed by Dr. Andrew Stevenson, and a Nissen fundoplication performed by Dr. Les Nathanson. I presented some of my own research and enjoyed an exciting evening touring Brisbane with Dr. Michael Muller. Before flying home, I spent a few days on the Great Barrier Reef that included snorkeling and visiting an animal park, where I had my picture taken with a koala bear and saw crocodiles, emus, and wallahies

I wish to thank both colleges for the opportunity provided by the Travelling Fellowship. I developed many new friendships that I hope will continue in the years to come.

Dr. Ashley is associate professor, division of general and gastrointestinal surgery, department of surgery, Brigham & Women's Hospital/Harvard Medical School, Boston, MA.

GOVERNORS' COMMITTEE, from page 32

Conclusion

During the four years that I served as a member of the Committee on Professional Liability and throughout the year I have chaired the Committee on Physician Competency and Liability, I have been proud of the effort and dedication each member of this committee has demonstrated. Ours is a dynamic body that has quickly and appropriately adapted to meet the chang-

ing needs of the individual surgeons that the Governors represent. We look forward to addressing the public's and the medical community's expectations that all surgeons practice with the utmost competence. If this topic interests you and you would like to help us face the challenges ahead, please contact one of the Governors listed in the roster on page 31 or contact me at jmdaly@mail.med.cornell.edu.

International Guest Scholarships available for 2002

The American College of Surgeons offers International Guest Scholarships to competent young surgeons who have demonstrated strong interests in teaching and research. The scholarships, in the amount of \$10,000 each, provide the scholars with an opportunity to visit clinical, teaching, and research facilities in North America and to attend and participate fully in the educational opportunities and activities of the American College of Surgeons' Clinical Congress.

This scholarship endowment was originally provided through the legacy left to the College by Paul R. Hawley, MD, FACS, former College Director. Recently, a bequest from the family of Abdol Islami, MD, FACS, and gifts from others to the International Guest Scholarship endowment have allowed the College to expand the number and the amount of the scholarship award.

The scholarship requirements are:

- Applicants must be graduates of schools of medicine and be between the ages of 30 and 42 on the date that the completed application is filed.
- Applicants must submit their applications from their intended permanent location. Applications will be accepted for processing only when the applicants have been in surgical practice, teaching, or research for a minimum of one year at their

intended permanent location, following completion of all formal training (including fellowships and scholarships).

- Applicants must have demonstrated a commitment to teaching and/or research in accordance with the standards of the applicant's country.
- Applicants whose careers are in the developing stage are deemed more suitable than those who are serving in senior academic appointments.
- Applicants must submit a fully completed application form provided by the College. The application must be typewritten and in English. (Submission of a curriculum vitae only is not acceptable.)
- Applicants must provide a list of all of their publications and must submit, in addition, three complete publications (reprints or manuscripts) of their choice from that list.
- Applicants must submit letters of recommendation from three of their colleagues, one of which must be from the chair of the department in which they hold academic appointment, or a Fellow of the American College of Surgeons residing in their country.

The chair's or the Fellow's letter is to include a specific statement detailing the nature and extent of the teaching and other academic involvement of the applicant. Letters of recommendation should be submitted in envelopes sealed by

the recommenders. These letters are to be submitted with the completed application form.

- Applicants may submit a photograph. (Passport size is preferable.)
- The International Guest Scholarships must be used in the year for which they are designated. They cannot be postponed.
- Applicants who are awarded scholarships are expected to provide a full report of the experiences provided through the scholarships upon completion of their tour.
- An unsuccessful applicant may reapply only twice and only by completing and submitting a current application form provided by the College, together with supporting documentation.

The scholarships provide successful applicants with the privilege of participating in the College's annual Clinical Congress in October, with public recognition of their presence. They will receive complimentary admission to selected postgraduate courses plus admission to all lectures, demonstrations, and exhibits, which are an integral part of the Clinical Congress. Assistance will be available in arranging visitations, following the Clinical Congress, to various clinics and universities of their

In order to qualify for consideration by the selection commit-

tee, all of the previous requirements must be fulfilled.

Formal American College of Surgeons International Guest Scholar application forms may be obtained by writing to the International Liaison Division, American College of Surgeons, 633 N. Saint Clair St., Chicago, IL 60611-3211, U.S.A., or by accessing the College's Web site at www.facs.org.

Completed application forms for the International Guest Scholarships for the year 2002 and all of the supporting documentation must be received at the office of the International Liaison Division prior to July 1, 2001, in order for an applicant

to receive consideration by the selection committee. All applicants will be notified of the selection committee's decision in November 2001. Applicants are urged to submit their completed applications and supporting documents as early as possible in order to provide sufficient time for processing.

2002 Australia and New Zealand Travelling Fellowship available

The International Relations Committee of the American College of Surgeons announces the availability of the Australia and New Zealand (ANZ) Chapter of the American College of Surgeons Travelling Fellowship.

Purpose

The purpose of this fellowship is to encourage international exchange of surgical scientific information.

Basic requirements

The fellowship is available to a Fellow of the American College of Surgeons in any of the surgical specialties who meets the following requirements:

- Has a major interest and accomplishment in basic science related to surgery.
- Holds a current full-time academic appointment in Canada or the United States.
- Is under 45 years of age on the date the application is filed.
- Is enthusiastic, personable, and possesses good communication skills.

Activities

The Fellow is required to spend a minimum of two or three weeks in Australia and New Zealand.

- To attend and participate in the Annual Scientific Congress of the Royal Australasian College of Surgeons, which will be held in Adelaide, South Australia (May 12–17, 2002).
- To participate in the formal convocation ceremony of that congress.
- To attend the ANZ Chapter meeting during that congress.
- To visit at least two medical centres (other than the Scientific Congress city) in Australia and New Zealand before or after The Annual Scientific Congress of the Royal Australasian College of Surgeons to lecture and to share clinical and scientific expertise with the local surgeons.

The academic and geographic aspects of the itinerary would be finalized in consultation and mutual agreement between the Fellow and the President or designated representative of the ANZ Chapter of the American College of Surgeons. The surgical centres to be visited would depend to some extent on the special interests and expertise of the Fellow and his or her previously established professional contacts with surgeons in Australia and New Zealand.

It is hoped that the successful applicant will be accompanied by his/her spouse. There will be many opportunities for social interaction, as well as these professional activities.

Financial support

The ANZ Chapter and the College will provide the sum of \$12,000 U.S. to the successful applicant who will also be exempted from registration fees for the Annual Scientific Congress. He/she must meet all travel and living expenses. Senior Chapter representatives will consult with the Fellow about the centres to be visited in Australia and New Zealand,

the local arrangements for each centre, and other advice and recommendations about travel schedules. The Fellow is to make his/her own travel arrangements in North America, as this makes available to him/her reduced fares and travel packages for travel in Australia and New Zealand.

The Fellow will be selected after review and evaluation of the final applications by the American College of Surgeons' International Relations Committee. A personal interview may be requested prior to the final selection

Applications for this travelling fellowship are to be requested from the International Liaison Division, American College of Surgeons, 633 N. Saint Clair St., Chicago, IL 60611-3211, or by accessing the College's Web site at www.facs.org.

The closing date for receipt of completed applications is April 1, 2001.

The successful applicant and an alternate will be selected and notified in August 2001. The formal announcement of the recipient will be made during the 2001 Clinical Congress of the American College of Surgeons in New Orleans, LA, October 7–12.

JACS now available on the Internet

The Journal of the American College of Surgeons (JACS) has a new Web site at www. iournalacs.org. This site is linked to the Web site of the American College of Surgeons (www.facs.org). JACS Online was initiated to provide an added access to complement the increased distribution of the printed journal. Fellows can log on with their name and member identification number to access the full text of all the articles in the current issue. and also to access an archive of all the articles that have

been published in *JACS* since 1997. Searches can be addressed by subject, title, or author. Most references are "hot linked" to their corresponding abstracts provided by the National Library of Medicine. Access is free to all Fellows and subscribers.

JACS Online has the advantage of getting JACS to your desk on the first of the month—no more waiting for mail delivery. The electronic archive saves shelf space. The search capabilities and linked references are valuable tools for all surgeons,

and not available in the printed version.

As the potential of electronic publishing emerges, new capabilities will enhance the way scientific information is presented in electronic media. In time, provisions for surgeons served by *JACS* to engage in electronic group discussions can evolve and links between letters to the editor and relevant articles may be established. Through such innovations, *JACS Online* will expand its role as a companion to the printed journal.

Update your information online

The College has developed a program through which Fellows can update and edit their individual listings (including addresses, telephone and fax numbers, and e-mail addresses).

Please visit the College's Web site at http://www.facs.org and click "Submit Revisions to Database Listing." Fellows will need their eight-digit identification number to input the information. Once you have en-

tered the information, your Fellowship record in the College membership database will automatically be updated. There is no need to notify the College offices.

ACS Scholarships, Fellowships, Award available

Resident Research Scholarships, July 1, 2002-June 30, 2004

The American College of Surgeons is offering two-year resident research scholarships. Eligibility for these scholarships is limited to the research projects of residents in surgery or a surgical specialty.

American College of Surgeons Resident Research Scholarship. These scholarships are supported by the generosity of Fellows, Chapters, and friends of the College, to encourage residents to pursue careers in academic surgery.

Ethicon Scholarship of the American College of Surgeons for the Study of Surgical Wound Healing. This scholarship is funded by a grant from Ethicon, Inc., and Ethicon Endo-Surgery to encourage residents to pursue careers in academic surgery. The scholarship is intended primarily to stimulate interest in the healing of soft tissue and minimally invasive surgery. Proposals may include the biology of wound repair, complications of wound repair, or the application of new technologies to clinical problems.

General policies covering the granting of the American College of Surgeons Resident Research Scholarships are:

- The applicant must have completed two postdoctoral years in an accredited surgical training program in the U.S. or Canada at the time the scholarship is awarded, July 1, 2002, and shall not complete formal residency training before June 2004. Scholarships do not support research after completion of the chief residency year.
- The scholarship is awarded for two years, and acceptance of it requires commitment for the two-year period. The award is to support a research plan for the two years of the scholarship, July 2002 through June 2004. Priority will be given to the projects of residents involved in full-time laboratory investigation. Study outside the U.S. or Canada is permissible. Renewal of the scholarship for the second year is required and is contingent

upon the acceptance of a progress report and research study protocol for the second year, as submitted to the Scholarships Division of the College by May 1, 2003.

- Application for these scholarships may be submitted even if comparable application to other organizations has been made. If the recipient accepts a scholarship/fellowship from another agency or organization, the ACS Resident Research Scholarship will be withdrawn. It is the responsibility of the applicant to notify the Scholarships Division of the College of competing awards.
- The scholarship is \$30,000 per year; the total amount is to support the research of the recipient and is not to diminish or replace the usual or expected compensation or benefits of the recipient. Indirect costs are not paid to the recipient or to the recipient's institution.
- The scholar is expected to attend the Clinical Congress of the American College of Surgeons in 2004 to present a report on the research to the Scholarships Committee on October 10, and to receive a certificate at the Annual Meeting of Fellows and Initiates on October 14.
- Approval of the application is required from the administration (dean or fiscal officer) of the institution. Supporting letters from the head of the department of surgery (or the surgical specialty) and from the mentor who will be supervising the applicant's research should be submitted. Only in exceptional circumstances will more than one scholarship be granted in a single year to applicants from the same institution.

The closing date for receipt of applications is September 1, 2001. Application forms may be obtained upon request from the Scholarships Division, American College of Surgeons, 633 N. Saint Clair St., Chicago, IL 60611-3211, or from the College's Web site, www.facs.org.

Faculty Research Fellowships, July 1, 2002–June 30, 2004

The American College of Surgeons is offering two-year faculty research fellowships, through the generosity of Fellows, Chapters, and friends of the College, to surgeons entering academic careers in surgery or a surgical specialty. The fellowship is to assist a surgeon in the establishment of a new and independent research program. Applicants should have demonstrated their potential to work as independent investigators. The fellowship award is \$40,000 per year for each of two years to support the research.

Franklin H. Martin, MD, FACS, Faculty Research Fellowship of the American College of Surgeons. One of the fellowships is named to honor Franklin H. Martin, MD, FACS, founder of the American College of Surgeons.

General policies covering the granting of the American College of Surgeons Faculty Research Fellowships are:

- The fellowship is restricted to surgeons who have: (1) completed the chief residency year or accredited fellowship training within the preceding three years; and (2) received a full-time faculty appointment in a department of surgery or a surgical specialty at a medical school accredited by the Liaison Committee on Medical Education in the U.S. or by the Committee for Accreditation of Canadian Medical Schools in Canada. Preference will be given to applicants who directly enter academic surgery following residency or fellowship.
- The fellowship grant is to support the research of the recipient and is not to diminish or replace the usual, expected compensation or benefits. Indirect costs are not paid to the recipient or to the recipient's institution.
- Preference will be given to applicants who are not current recipients of major research grants.
 Application for this fellowship may be submitted

even if comparable application to other organizations has been made. If the recipient accepts a scholarship, fellowship, or research career development award from another agency or organization, the ACS Faculty Research Fellowship will be withdrawn. It is the responsibility of the recipient to notify the Scholarships Division of the College of competing awards.

- Supporting letters from the head of the department of surgery (or the surgical specialty) and from the senior investigator (if applicable) supervising the applicant's research effort should be submitted. This approval would involve a commitment to continuation of the academic position and of facilities for research. Only in exceptional circumstances will more than one fellowship be granted in a single year to applicants from the same institution.
- The applicant must submit a research plan and budget for the two-year period of fellowship, even though renewed approval by the Scholarships Committee of the College is required for the second year.
- A minimum of 50 percent of the fellow's time will be spent in the research proposed in the application.
- The fellow is expected to attend the Clinical Congress of the American College of Surgeons in 2004 to present a report to the Scholarships Committee on October 10, and to receive a certificate at the Annual Meeting of Fellows and Initiates on October 14.

The closing date for receipt of applications is November 1, 2001. Application forms may be obtained upon request from the Scholarships Division, American College of Surgeons, 633 N. Saint Clair St., Chicago, IL 60611-3211, or from the College's Web site, www.facs.org.

George H. A. Clowes, Jr., MD, FACS, Memorial Research Career Development Award, July 1, 2002–June 30, 2007

This award is developed through the generosity of The Clowes Fund, Inc., of Indianapolis, IN. The purpose of the award is to provide five

years of support for the research of a promising young surgical investigator. The award consists of a grant of \$40,000 for each of five years and

is not renewable thereafter.

General policies concerning the granting of the George H. A. Clowes., Jr., MD, FACS, Memorial Research Career Development Award are:

- The award is restricted to a surgeon who has completed specialty training in a residency or an accredited fellowship in general surgery or a surgical specialty within the preceding five years and has received a full-time faculty appointment at a medical school accredited by the Liaison Committee on Medical Education in the United States or by the Committee for Accreditation of Canadian Medical Schools in Canada. Applicants should provide evidence (by publication or otherwise) of productive initial efforts in laboratory research.
- The award may be used for salary support or other purposes at the discretion of the recipient and the institution. Indirect costs are not paid to the recipient or to the recipient's institution.
- The American College of Surgeons Scholarships Committee will look favorably upon applicants who have received investigator-initiated, peer-reviewed research awards (for example, National Institutes of Health [NIH] R01 grants). The committee will not consider applicants who have received research career development type awards from either the NIH, the American Heart Association, or other funding agencies. Also, the recipient may not receive another career development award during the five-year period of support. It is the responsibility of the recipient to notify the Scholarships Division of the College if another source of scholarship/fellowship funding is received.
 - Approval of the application is required from

the administration (dean or fiscal officer) and the head of the applicant's department or administrative unit. This approval would involve a commitment to continuation of the academic position and facilities for research during the entire period of the award. Furthermore, it must be assured that at least 50 percent of the applicant's time will be spent in the research proposed in the application.

- The applicant must submit a detailed research plan and propose a budget for the five-year period of the award. The applicant also is required to submit a cover letter of approximately 400 words that describes career objectives, how these career objectives will be achieved, and how the research protocol furthers the applicant's career development. The Scholarships Committee of the College requires an annual progress report from the recipient on which annual renewal is based.
- While holding the award, the recipient is expected to attend the Clinical Congress of the American College of Surgeons in 2003, 2005, and 2007 to present reports to the Scholarships Committee.
- Upon completion of the five-year funding period, the recipient will be required to submit a summary of research progress and to provide information regarding current academic rank, sources of research support, and future plans.

The closing date for receipt of completed applications is August 1, 2001. Application forms may be obtained upon request from the Scholarships Division, American College of Surgeons, 633 N. Saint Clair St., Chicago, IL 60611-3211, or from the College's Web site, www.facs.org.

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not there. This can be fine if the intention of bringing in a new associate was to replace a retiring or departing partner. Again, short-term economic consequences can be predicted and the departing physician can be economically prepared to have the pay cut. This will work best when the time period to be covered by both surgeons is minimal, probably no more than one year.

Retirement will be discussed in the next issue. Please feel free to contact Mr. Loughrey with This column responds to questions from the Fellows and their staffs, and provides useful tips for surgical practices. Developed by the College staff and consultants, this information will be accessible on our Web site for easy retrieval and future access. If there are topics that you would like to see addressed in future columns, please contact the Chicago staff of the Health Policy and Advocacy Department, tel. 312/202-5150; fax 312/202-5021; or e-mail HealthPolicyAdvocacy@facs.org.

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The *Journal* page

Message from the Editor

by Seymour I. Schwartz, MD, FACS, Rochester, NY

What goes around comes around. The *Journal of the American College of Surgeons (JACS)* surely now goes around to many surgeons in this country and the world. With the January 2001 edition of *JACS* comes an exciting new venture—a CME-1 program that is available both online at *http://www.jacscme.org* and in the printed version of the *Journal*. The addition of the potential for readers to acquire CME-1 credits expeditiously speaks to the College's credo to continually disseminate current information to the surgical universe and to its mission to maintain high standards of patient care.

In the beginning, there was only the journal *Surgery, Gynecology and Obstetrics*, which was initiated in 1905. It was the seed for the College itself. And then there were the Clinical Congresses in 1910, 1911, 1912, and 1913, providing a venue for practicing surgeons to amplify their knowledge base and skills. And in 1913, the American Col-

lege of Surgeons was incorporated.

During the ensuing years, the Clinical Congress and the literature emanating from the College, including the articles in the *Journal*, have remained dedicated to continuing medical education. Now that most states mandate evidence that their licensed physicians satisfy the prescribed requisites of continuing education, the *Journal* is there to fill that need. *JACS*, a seminal factor in the genesis of the College, a continuing participant in the education of surgeons, has now generated a process by which its readership can acquire the necessary documentation of continuing medical education. A circle has been completed.

Dr. Schwartz is Distinguished Alumni Professor, University of Rochester (NY) School of Medicine and Dentistry. He is also Editor-in-Chief of the Journal of the American College of Surgeons and a Past-President of the College.

INTRODUCTORY ABSTRACT from the February lead article

"Insignificant" Mechanism of Injury: Not to Be Taken Lightly. George C Velmahos, MD, PhD, FACS, Anurag Jindal MD, Linda S Chan, PhD, James A Murray, MD, Pantelis Vassiliu, MD, Thomas V. Berne, MD, FACS, Juan Asensio, MD, FACS, Demetrios Demetriades, MD, PhD, FACS. From the department of surgery and the division of biostatistics and outcome research, University of Southern California Keck School of Medicine, and the Los Angeles County+USC Medical Center, Los Angeles, CA.

Background: Trauma resources should be spent rationally. The mechanism of trauma is used extensively to triage patients to appropriate levels of care. We examine the hypothesis that patients with "insignificant" mechanism of trauma may have major injuries that require expert trauma care.

Study design: Over nine months at a high-volume level-I trauma center, patients were studied prospectively who sustained ground-level falls, low-level falls from less than 10 feet, or were found down with no

external evidence of significant trauma, and required evaluation by the trauma team. Of 301 patients included, 110 (37%) had ground-level falls, 95 (31%) low-level falls, and 96 (32%) were found down. Our main outcome measure was significant injuries, defined as visceral or intracranial injuries, long-bone, pelvic, facial or spinal fractures.

Results: One hundred ten patients (37%) had significant injuries, 20 (7%) were admitted to the intensive care unit, 14 (5%) required an operation, and four (1%) died. The most common injuries were intracranial and skeletal. Almost all patients were evaluated by CT (95%), but only one quarter had abnormal findings on it. Low-level falls, age more than 55 years, and the absence of severe intoxication (blood alcohol level of less than 200 mg/dL) were independent risk factors for significant injuries. A statistical prediction model showed that, when all risk factors are present, the probability of significant injuries is 73%; when all risk factors are absent, there is still a 16% chance for signifi-

cant injuries. Patients with significant injuries had more operations, longer hospital stays, and higher hospitalization costs compared to patients without significant injuries.

Conclusions: Low-energy trauma may produce significant injuries, predominantly intracranial and skeletal. Trauma care providers should be cautious about

dismissing such patients based on the trivial mechanism of injury. Patients with low-level falls who are older than 55 years and not severely intoxicated have a high likelihood for significant injuries. Resources should be spent rationally for patients who do not have these characteristics because the probability of significant injuries among them is low, but not zero.

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increased operative complexity and/or time in a significantly altered surgical field. The modifier should be used when the surgical field has been altered by the effects of prior surgery (including marked scarring or adhesions), inflammation or infection, distorted anatomy, irradiation, very low weight (that is, neonates and infants less than 10 kg), and/or trauma. The language for modifier -22 (unusual procedural services) has been revised to indicate that services involving an altered surgical field should be reported using modifier -60 instead of modifier -22.

At press time, HCFA staff had said they were preparing instructions for Medicare carriers on the altered surgical field modifier. They were planning to tell carriers not to recognize the new modifier. Instead they are to continue to recognize modifier -22 (unusual procedural services) as they had done in 2000. That means that surgeons should continue to report modifier -22 as they did in 2000 and Medicare will continue to review the cases and make additional payment when their critieria is met, as they did in 2000. We will report again in a "Socioeconomic tips of the month" article in the *Bulletin* on the Medicare instruction when it has been released. We have no information about how other third-party payors plan to react to modifier -60.

Coding workshops

The College will be hosting 10 coding workshops for the first half of 2001. We have a new one-day format, for all surgeons, with a new consultant. The program, Coding and Documentation: The Keys to Reimbursement, will present both CPT and ICD-9-CM coding for surgeons and their office staff that is basic to intermediate. The program will include an interactive networking lunch to assist in meeting other colleagues with similar coding issues. Earn eight Category 1 CME credit hours.

Dates and locations:	February 22, 2001	Wyndham Anatole, Dallas, TX (program in conjunction with the February 23-24 North Dallas Chapter meeting)	
	February 24, 2001	Hilton Ft. Lauderdale Airport, FL	
	March 30, 2001	Doubletree Crystal City, Arlington, VA	
	March 31, 2001	Crown Plaza, Secaucus, NJ	
	April 28, 2001	Pointe Hilton at Squaw Peak, Phoenix, AZ	
	May 10, 2001	Sinclair Community College, Dayton, OH	
		(program in conjunction with the May 10-12 Ohio Chapter meeting)	
	May 27, 2001	Hilton San Francisco, CA	
	June 22, 2001	ACS Headquarters, Chicago, IL	
	June 23, 2001	Lake Lawn Resort, Delavan, WI	

For further registration information, contact Diane Mazmanian at 312/202-5406; fax: 312/202-5021; e-mail dmazmanian@facs.org.